Department of Defense Fiscal Year (FY) 2020 Budget Estimates

March 2019



Navy

Justification Book Volume 1 of 3

Aircraft Procurement, Navy
Budget Activities 01-04

UNCLASSIFIED

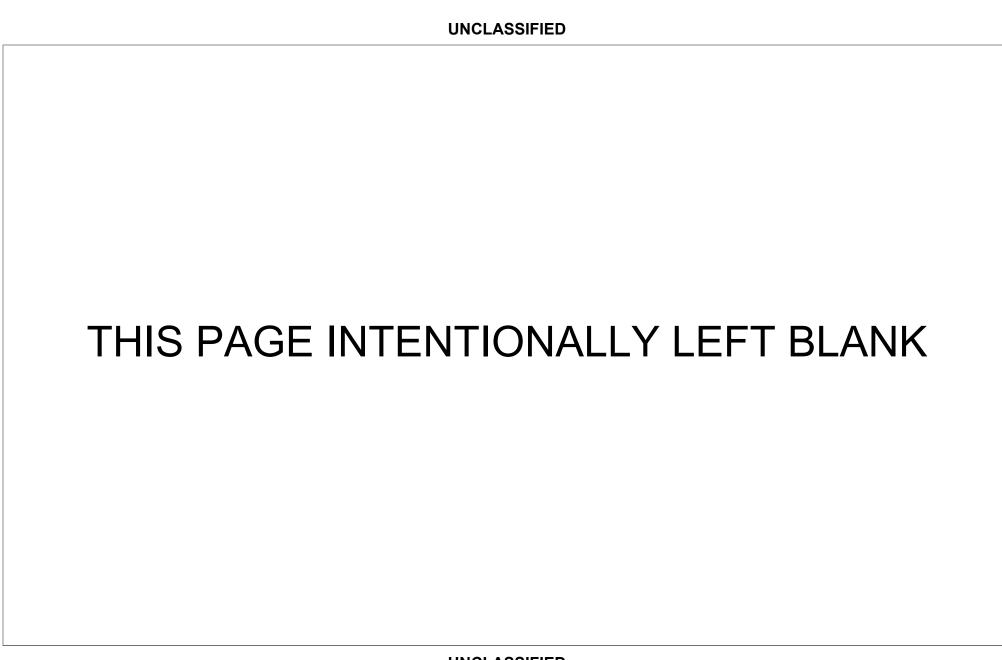
The estimated cost of this report for the Department of the Navy (DON) is \$94,482.

The estimated total cost for supporting the DON budget justification material is approximately \$1,803,116 for the 2019 fiscal year. This includes \$81,351 in supplies and \$1,721,765 in labor.

Navy • Budget Estimates FY 2020 • Procurement

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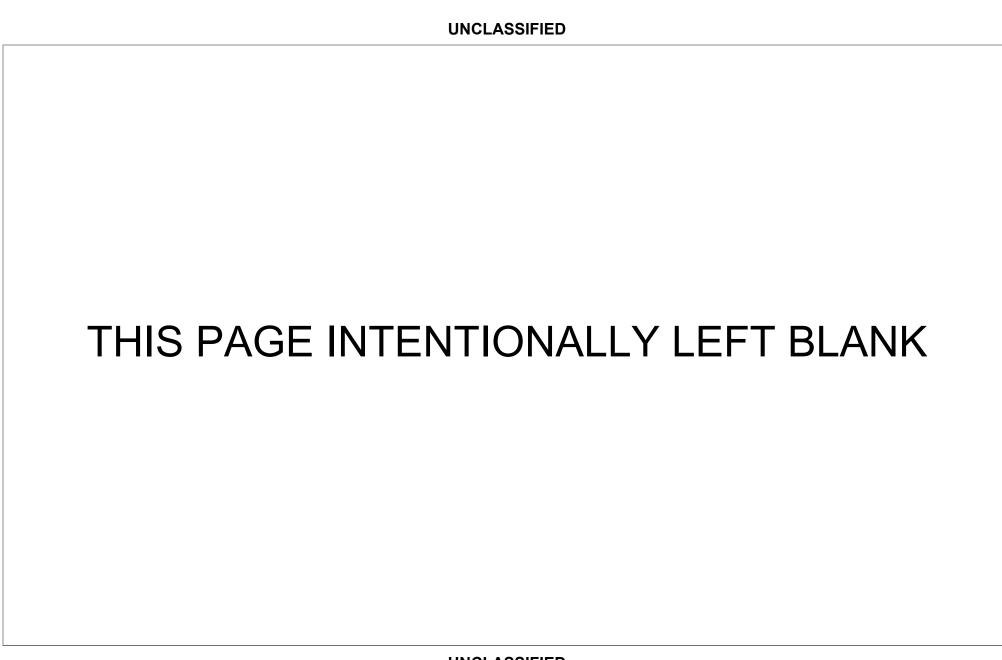
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Navy • Budget Estimates FY 2020 • Procurement

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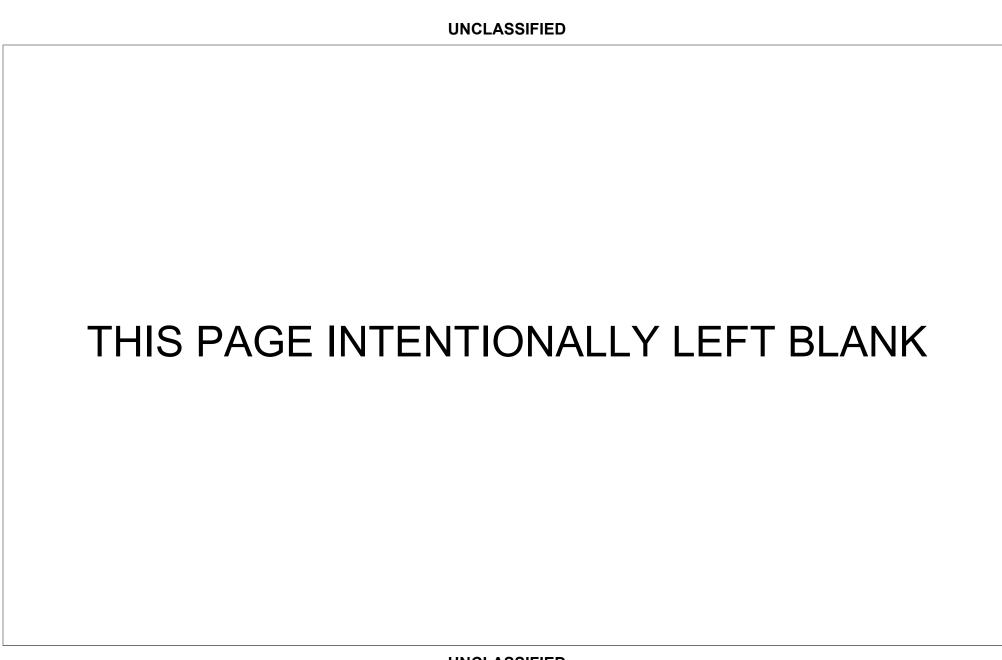
Department of Defense Appropriations Act, 2020

Aircraft Procurement, Navy

For construction, procurement, production, modification, and modernization of aircraft, equipment, including ordnance, spare parts, and accessories therefore; specialized equipment; expansion of public and private plants, including the land necessary therefore, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway, \$18,641,249,000, to remain available for obligation until September 30, 2022.

FY 2020 Overseas Contingency Operations funding can be separated into the following categories:

- OCO for Direct War Costs (\$102,211,000): Direct War costs are those combat or direct combat support costs that will not continue to be expended once combat operations end at major contingency locations.
- OCO for Enduring Requirements (\$16,834,000): OCO for Enduring Requirements are enduring in-theater and in-CONUS costs that will likely remain after combat operations cease, and have previously been funded in OCO.
- OCO for Base Requirements (\$0): OCO for Base Requirements is OCO funding for base budget requirements in support of the National Defense Strategy. The Budget requests these funds in OCO to comply with the base budget defense caps included in the Budget Control Act of 2011.



Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Appropriation	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
Aircraft Procurement, Navy	20,103,259	20,092,199	232,119	20,324,318
Total Department of the Navy	20,103,259	20,092,199	232,119	20,324,318

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Appropriation	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO
Aircraft Procurement, Navy	18,522,204		119,045	119,045
Total Department of the Navy	18,522,204		119,045	119,045

Department of the Navy
FY 2020 President's Budget
Exhibit P-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation	FY 2020 Total (Base + OCO)
Aircraft Procurement, Navy	18,641,249
Total Department of the Navy	18,641,249

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Budget Activity	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
01. Combat Aircraft	13,090,227	13,006,745	152,000	13,158,745
02. Airlift Aircraft	207,000			
03. Trainer Aircraft				
04. Other Aircraft	1,189,372	1,604,927	35,065	1,639,992
05. Modification of Aircraft	2,927,345	3,071,125	45,054	3,116,179
06. Aircraft Spares and Repair Parts	2,195,764	1,880,420		1,880,420
07. Aircraft Support Equip & Facilities	493,551	528,982		528,982
Total Aircraft Procurement, Navy	20,103,259	20,092,199	232,119	20,324,318

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

FY 2020

			OCO for				
		FY 2020	Direct War	FY 2020			
	FY 2020	OCO for Base	and Enduring	Total			
Budget Activity	Base	Requirements	Costs	oco			
01. Combat Aircraft	10,270,201						
02. Airlift Aircraft							
03. Trainer Aircraft	261,160						
04. Other Aircraft	1,586,693		84,921	84,921			
05. Modification of Aircraft	3,497,284		34,124	34,124			
06. Aircraft Spares and Repair Parts	2,166,788						
07. Aircraft Support Equip & Facilities	740,078						
Total Aircraft Procurement, Navy	18,522,204		119,045	119,045			

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

FY 2020

Budget Activity	Total (Base + OCO)
01. Combat Aircraft	10,270,201
02. Airlift Aircraft	
03. Trainer Aircraft	261,160
04. Other Aircraft	1,671,614
05. Modification of Aircraft	3,531,408
06. Aircraft Spares and Repair Parts	2,166,788
07. Aircraft Support Equip & Facilities	740,078
Total Aircraft Procurement, Navy	18,641,249

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code 	FY 2018 (Base + OCO) Quantity Cost	FY 2019 Base Enacted Quantity Cost	FY 2019 OCO Enacted Quantity Cost	FY 2019 S Total Enacted e Quantity Cost c
Budget Activity 01: Combat Aircraft					
Combat Aircraft					
1 F/A-18E/F (Fighter) Hornet Less: Advance Procurement (PY)	А	24 (1,826,192)	24 (1,922,275) (-52,971)		24 (1,922,275) U (-52,971) U
		1,826,192	1,869,304		1,869,304
2 F/A-18E/F (Fighter) Hornet Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)		52,971 (52,971)	53,977 (53,977)		53,977 U (53,977)
C (FY 2020 for FY 2021) (M)					
<pre>3 Joint Strike Fighter CV Less: Advance Procurement (PY)</pre>	A	10 (1,434,932) (-80,908)	15 (2,150,369) (-196,411)		15 (2,150,369) U (-196,411) U
		1,354,024	1,953,958		1,953,958
4 Joint Strike Fighter CV Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2018 for FY 2020) (M)		263,112 (196,411)	140,010		140,010 U
C (FY 2018 for FY 2020) (M) C (FY 2019 for FY 2020) (M) C (FY 2020 for FY 2021) (M) C (FY 2020 for FY 2022) (M) C (FY 2020 for FY 2023) (M)		(66,701)	(140,010)		(140,010)

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	FY 2020 Ident Base Code Quantity Cost		FY 20 OCO for Require Quantity	Base	FY 20 OCO i Direct and End Cost Quantity	for War during	То	2020 tal CO Cos:	S e t c		
Budget Activity 01: Combat Aircraft											
Combat Aircraft											
1 F/A-18E/F (Fighter) Hornet Less: Advance Procurement (PY)	А	24		2,911) 3,977)							U U
			1,748								
2 F/A-18E/F (Fighter) Hornet Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)			55	5,128							U
C (FY 2020 for FY 2021) (M)			(55	5,128)							
3 Joint Strike Fighter CV Less: Advance Procurement (PY)	А	20		9,012) 5,711)							U U
			2,272								
4 Joint Strike Fighter CV Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2018 for FY 2020) (M)			339	9,053							Ū
C (FY 2019 for FY 2020) (M) C (FY 2020 for FY 2021) (M) C (FY 2020 for FY 2022) (M) C (FY 2020 for FY 2023) (M)			(30	0,530) 0,834) 7,689)							

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code	(B	FY 2020 Total ase + OCO) ity Cost	
Budget Activity 01: Combat Aircraft				
Combat Aircraft				
1 F/A-18E/F (Fighter) Hornet Less: Advance Procurement (PY)	A	24	(1,802,911) (-53,977)	
			1,748,934	
2 F/A-18E/F (Fighter) Hornet Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)			55,128	U
C (FY 2020 for FY 2021) (M)			(55,128)	
3 Joint Strike Fighter CV Less: Advance Procurement (PY)	A	20	(2,479,012) (-206,711)	
			2,272,301	
4 Joint Strike Fighter CV Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2018 for FY 2020) (M) C (FY 2019 for FY 2020) (M)			339,053	U
C (FY 2019 101 FY 2020) (M) C (FY 2020 for FY 2021) (M) C (FY 2020 for FY 2022) (M) C (FY 2020 for FY 2023) (M)			(280,530) (30,834) (27,689)	

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code	FY 2018 (Base + OCO) Quantity Cost		FY 2019 Base Enacted Quantity Cost			-		-	S e c
5 JSF STOVL Less: Advance Procurement (PY)		24	(3,185,195) (-233,648)	22	(2,850,311) (-322,264)			22	(2,850,311 (-322,264) U
			2,951,547		2,528,047				2,528,047	
6 JSF STOVL Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2018 for FY 2020) (M)			413,450 (322,264) (91,186)		228,492				228,492	. U
C (FY 2010 for FY 2020) (M) C (FY 2020 for FY 2021) (M) C (FY 2020 for FY 2022) (M) C (FY 2020 for FY 2023) (M)			(31,100)		(228, 492)				(228,492	.)
7 CH-53K (Heavy Lift) Less: Advance Procurement (PY)	А	6	(874,474) (-71,869)	8	(1,154,645) (-147,046)			8	(1,154,645 (-147,046) U
			802 , 605		1,007,599				1,007,599	
8 CH-53K (Heavy Lift) Advance Procurement (CY) C (FY 2018 for FY 2019) (M)			147,046 (147,046)		161,079				161,079) U
C (FY 2019 for FY 2020) (M) C (FY 2020 for FY 2021) (M)					(161,079)				(161,079))
9 V-22 (Medium Lift) Less: Advance Procurement (PY)		14	(1,275,138) (-19,674)	11	(1,005,726) (-23,389)	2	(152,000)	13	(1,157,726 (-23,389) U
			1,255,464		982,337		152,000		1,134,337	
10 V-22 (Medium Lift) Advance Procurement (CY) C (FY 2018 for FY 2019) (M)			23,389 (23,389)		28,755				28 , 755	U
C (FY 2019 for FY 2020) (M) C (FY 2020 for FY 2021) (M)					(28,755)				(28,755)

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

FY 2020

Line	Ident		2020 Base	FY 2020 OCO for Base Requirements		OCO for Direct War and Enduring Costs		FY 2020 Total OCO		S e
No Item Nomenclature	Code	Quantit		Quantity	Cost	Quantity	Cost	Quantity	Cost	C _
5 JSF STOVL Less: Advance Procurement (PY)			1,661,713) (-319,678)							U
			1,342,035							
6 JSF STOVL Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2018 for FY 2020) (M)			291,804							U
C (FY 2019 for FY 2020) (M) C (FY 2020 for FY 2021) (M) C (FY 2020 for FY 2022) (M) C (FY 2020 for FY 2023) (M)			(249,554) (21,125) (21,125)							
7 CH-53K (Heavy Lift) Less: Advance Procurement (PY)	А		(968,955) (-161,079)							U
			807 , 876							
8 CH-53K (Heavy Lift) Advance Procurement (CY) C (FY 2018 for FY 2019) (M)			215,014							U
C (FY 2019 for FY 2020) (M) C (FY 2020 for FY 2021) (M)			(215,014)							
9 V-22 (Medium Lift) Less: Advance Procurement (PY)		10	(995,421) (-28,755)							U
			966,666							
10 V-22 (Medium Lift) Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)			27,104							U
C (FY 2020 for FY 2021) (M)			(27,104)							

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No	Item Nomenclature	Ident Code 		TY 2020 Total ase + OCO) ty Cost	
5	JSF STOVL Less: Advance Procurement (PY)		10	(1,661,713) (-319,678)	
				1,342,035	
6	JSF STOVL Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2018 for FY 2020) (M) C (FY 2019 for FY 2020) (M)			291,804	U
	C (FY 2020 for FY 2021) (M) C (FY 2020 for FY 2022) (M) C (FY 2020 for FY 2023) (M)			(249,554) (21,125) (21,125)	
7	CH-53K (Heavy Lift) Less: Advance Procurement (PY)	A	6	(968,955) (-161,079)	
				807 , 876	
8	CH-53K (Heavy Lift) Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)			215,014	U
	C (FY 2020 for FY 2021) (M)			(215,014)	
9	V-22 (Medium Lift) Less: Advance Procurement (PY)		10	(995,421) (-28,755)	
				966,666	
10	V-22 (Medium Lift) Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)			27,104	U
	C (FY 2020 for FY 2021) (M)			(27,104)	

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code 		4		<u></u>	FY 2019 OCO Enacted Quantity Cost		4	s e c
11 H-1 Upgrades (UH-1Y/AH-1Z) Less: Advance Procurement (PY)	А	29	(938,961) (-49,194)	25	(840,437) (-42,082)		25	(840,437) (-42,082)	U
			889,767		798,355			798 , 355	
12 H-1 Upgrades (UH-1Y/AH-1Z) Advance Procurement (CY) C (FY 2018 for FY 2019) (M)			42,082 (42,082)						U
13 MH-60R (MYP)	A	8	400,000						U
14 P-8A Poseidon Less: Advance Procurement (PY)	А	10	(1,840,515) (-130,873)	10	(1,908,367) (-146,614)		10	(1,908,367) (-146,614)	U
			1,709,642		1,761,753			1,761,753	
15 P-8A Poseidon Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)			140,600 (140,600)		180,000			180,000 (180,000)	
16 E-2D Adv Hawkeye Less: Advance Procurement (PY)	А	5	(987,313) (-271,003)	6	(1,174,371) (-102,026)		6	(1,174,371) (-102,026)	U
			716,310		1,072,345			1,072,345	
17 E-2D Adv Hawkeye Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M) C (FY 2019 for FY 2021) (M) C (FY 2019 for FY 2022) (M) C (FY 2019 for FY 2023) (M) C (FY 2020 for FY 2021) (M) C (FY 2020 for FY 2022) (M)			102,026 (102,026)		240,734 (126,128) (38,202) (38,202) (38,202)			240,734 (126,128) (38,202) (38,202) (38,202)	
C (FY 2020 for FY 2023) (M) Total Combat Aircraft			13,090,227		13,006,745	152,000		 13,158,745	

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

FY 2020

Line	Ident	FY 2020 Base	FY 2020 OCO for Base Requirements	OCO for Direct War and Enduring Costs	FY 2020 Total S OCO e
No Item Nomenclature	Code 	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost c
11 H-1 Upgrades (UH-1Y/AH-1Z) Less: Advance Procurement (PY)	А	(62,003)			U U
		62,003			
12 H-1 Upgrades (UH-1Y/AH-1Z) Advance Procurement (CY) C (FY 2018 for FY 2019) (M)					Ū
13 MH-60R (MYP)	А	894			Ū
14 P-8A Poseidon Less: Advance Procurement (PY)	А	6 (1,386,701) (-180,000) 1,206,701			U U
15 P-8A Poseidon Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)		1,200,.01			Ū
16 E-2D Adv Hawkeye Less: Advance Procurement (PY)	А	4 (870,612) (-126,128) 744,484			U U
17 E-2D Adv Hawkeye Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M) C (FY 2019 for FY 2021) (M) C (FY 2019 for FY 2022) (M) C (FY 2019 for FY 2023) (M)		190,204			U
C (FY 2019 for FY 2021) (M) C (FY 2020 for FY 2021) (M) C (FY 2020 for FY 2022) (M) C (FY 2020 for FY 2023) (M)		(122,290) (33,957) (33,957)			
Total Combat Aircraft		10,270,201			

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code	FY 2020 Total S (Base + OCO) e Quantity Cost c
11 H-1 Upgrades (UH-1Y/AH-1Z) Less: Advance Procurement (PY)	А	(62,003) U
		62,003
12 H-1 Upgrades (UH-1Y/AH-1Z) Advance Procurement (CY) C (FY 2018 for FY 2019) (M)		U
13 MH-60R (MYP)	А	894 U
14 P-8A Poseidon Less: Advance Procurement (PY)	А	6 (1,386,701) U (-180,000) U
		1,206,701
15 P-8A Poseidon Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)		U
16 E-2D Adv Hawkeye Less: Advance Procurement (PY)	A	4 (870,612) U (-126,128) U 744,484
17 E-2D Adv Hawkeye Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M) C (FY 2019 for FY 2021) (M) C (FY 2019 for FY 2022) (M)		190,204 U
C (FY 2019 for FY 2023) (M) C (FY 2020 for FY 2021) (M) C (FY 2020 for FY 2022) (M) C (FY 2020 for FY 2023) (M)		(122,290) (33,957) (33,957)
Total Combat Aircraft		10,270,201

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code		4		-	FY 20 OCO Ena Quantity		y Cost	s e c
Budget Activity 02: Airlift Aircraft									
Airlift Aircraft									
18 C-40A	А	2	207,000						U
Total Airlift Aircraft			207,000				 -		-
Budget Activity 03: Trainer Aircraft									
Trainer Aircraft									
19 Advanced Helicopter Training System	A								U
Total Trainer Aircraft									-
Budget Activity 04: Other Aircraft									
Other Aircraft									
20 KC-130J Less: Advance Procurement (PY)	А	6	(501,125) (-28,848)	2	(175,930) (-25,497)		 2	(175,930) (-25,497)) U
			472,277		150,433		 -	150,433	
21 KC-130J Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M) C (FY 2019 for FY 2021) (M) C (FY 2019 for FY 2022) (M) C (FY 2019 for FY 2023) (M) C (FY 2020 for FY 2021) (M)			25,497 (25,497)		102,013 (26,013) (20,000) (24,000) (32,000)			102,013 (26,013) (20,000) (24,000) (32,000))))
22 F-5	А								U

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

FY 2020

Line No Item Nomenclature	Ident Code	FY 2 Ba Quantity	2020 ase Cost	FY 20 OCO for Require Quantity	Base	OCO f Direct and End Cost Quantity	for War during	FY 20 Tota OCC Quantity	al	S e c
No recal Nonchestature										-
Budget Activity 02: Airlift Aircraft										
Airlift Aircraft										
18 C-40A	A									U
Total Airlift Aircraft										-
Budget Activity 03: Trainer Aircraft										
Trainer Aircraft										
19 Advanced Helicopter Training System	A		261,160							U
Total Trainer Aircraft			261,160							-
Budget Activity 04: Other Aircraft										
Other Aircraft										
20 KC-130J	A		(266,853)							U
Less: Advance Procurement (PY)			(-26,013)							- U
21 KC-130J			240,840							
Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M) C (FY 2019 for FY 2021) (M) C (FY 2019 for FY 2022) (M) C (FY 2019 for FY 2023) (M) C (FY 2020 for FY 2021) (M)			66,061							U
22 F-5	А	22	39,676							U

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No	Item Nomenclature	Ident Code 	(Ba	Y 2020 Total se + OCO) ty Cost	e c
_	Activity 02: Airlift Aircraft				
Airli	ft Aircraft				
18 C-	40A	A			U
Total .	Airlift Aircraft				
	Activity 03: Trainer Aircraft				
Train	er Aircraft				
19 Ad	vanced Helicopter Training System	А	32	261,160	U
Total	Trainer Aircraft			261,160	
_	Activity 04: Other Aircraft				
Other	Aircraft				
	-130J ss: Advance Procurement (PY)	А	3	(266,853) (-26,013)	
				240,840	
Ad C C C C	-130J vance Procurement (CY) (FY 2018 for FY 2019) (M) (FY 2019 for FY 2020) (M) (FY 2019 for FY 2021) (M) (FY 2019 for FY 2022) (M) (FY 2019 for FY 2023) (M)			66,061	Ū
	(FY 2020 for FY 2021) (M)			(66,061)	
22 F-	5	A	22	39,676	U

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code	FY 2018 (Base + OCO) Quantity Cos	t Quantity Cost	FY 2019 OCO Enacted Quantity Cost	FY 2019 S Total Enacted e Quantity Cost c
23 MQ-4 Triton Less: Advance Procurement (PY)	А	3 (551,19 (-55,65	2) (-57,266)		3 (601,283) U (-57,266) U
		495,54			544,017
24 MQ-4 Triton Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)		57,26 (57,26			58,522 U (58,522)
C (FY 2020 for FY 2021) (M)			(30,322)		(30,322)
25 MQ-8 UAV	В	6 128,81	2 89,061		89,061 U
26 STUASLO UAV		9,98	0 11,866	35,065	46,931 U
27 MQ-9A Reaper	A				U
28 VH-92A Executive Helo			6 649,015		6 649,015 U
Total Other Aircraft		1,189,37	2 1,604,927	35,065	1,639,992
Budget Activity 05: Modification of Aircraft					
Modification of Aircraft					
29 AEA Systems		49,72	9 40,277		40,277 U
30 AV-8 Series	A	41,76	2 58,577		58 , 577 U
31 Adversary	A	2,56	5 14,606		14,606 U
32 F-18 Series	A	1,007,03	0 1,159,675		1,159,675 U
33 H-53 Series	A	39,12	5 70,997		70 , 997 U
34 MH-60 Series	А	99,11	1 125,862	4,858	130,720 U
35 H-1 Series	A	99,12	4 87,143		87,143 U

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

FY 2020

Line No Item Nomenclature	Ident Code	FY 2020 Base	FY 2020 OCO for Base Requirements	OCO for Direct War and Enduring Costs	FY 2020 Total S OCO e	
No Item Nomenclature		Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost c	
23 MQ-4 Triton Less: Advance Procurement (PY)	А	2 (531,656) (-58,522)			U	
		473,134				
24 MQ-4 Triton Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M)		20,139			ט	
C (FY 2020 for FY 2021) (M)		(20,139)				
25 MQ-8 UAV	В	44,957			Ū	
26 STUASLO UAV		43,819		7,921	7,921 U	
27 MQ-9A Reaper	A			3 77,000	3 77,000 U	
28 VH-92A Executive Helo		6 658 , 067			U	
Total Other Aircraft		1,586,693		84,921	84,921	
Budget Activity 05: Modification of Aircraft						
Modification of Aircraft						
29 AEA Systems		44,470			U	
30 AV-8 Series	A	39,472			Ū	
31 Adversary	А	3,415			Ū	
32 F-18 Series	А	1,207,089			U	
33 H-53 Series	А	68,385			U	
34 MH-60 Series	А	149,797			U	
35 H-1 Series	А	114,059			Ū	

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code 	T (Bas	7 2020 Potal Se + OCO) Cy Cost	е
23 MQ-4 Triton Less: Advance Procurement (PY)	А	2	(531,656) (-58,522)	U
			473,134	
24 MQ-4 Triton Advance Procurement (CY) C (FY 2018 for FY 2019) (M) C (FY 2019 for FY 2020) (M) C (FY 2020 for FY 2021) (M)			20,139	
25 MQ-8 UAV	В		44,957	
-	Б		•	
26 STUASLO UAV			51,740	
27 MQ-9A Reaper	А	3	77,000	U
28 VH-92A Executive Helo		6	658,067	U
Total Other Aircraft			1,671,614	
Budget Activity 05: Modification of Aircraft				
Modification of Aircraft				
29 AEA Systems			44,470	U
30 AV-8 Series	А		39,472	U
31 Adversary	A		3,415	U
32 F-18 Series	А		1,207,089	U
33 H-53 Series	А		68,385	U
34 MH-60 Series	А		149,797	U
35 H-1 Series	А		114,059	U

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code	FY 2018 (Base + OCO) Quantity Cost	FY 2019 Base Enacted Quantity Cost	FY 2019 OCO Enacted Quantity Cost	FY 2019 Total Enacted Quantity Cost	S e c
36 EP-3 Series	А	14,451	3,633	5,380	9,013	U
37 P-3 Series	A	700	803		803	U
38 E-2 Series	А	65,474	82 , 980		82,980	U
39 Trainer A/C Series	А	8,101	11,660		11,660	U
40 C-2A	А	18,592	8,327		8,327	U
41 C-130 Series	А	204,444	70,537		70,537	U
42 FEWSG	А	630	597		597	U
43 Cargo/Transport A/C Series	A	10,075	8,932		8,932	U
44 E-6 Series	A	194,391	164,511		164,511	U
45 Executive Helicopters Series	A	31,787	23,566		23,566	U
46 Special Project Aircraft	A	28,159	7,620	2,165	9,785	U
47 T-45 Series	A	164,191	193,567		193,567	U
48 Power Plant Changes	А	23,587	21,521		21,521	U
49 JPATS Series	А	24,907	26,470		26,470	U
50 Aviation Life Support Mods	A		15,864		15,864	U
51 Common ECM Equipment	А	226,998	185,218	9,820	195,038	U
52 Common Avionics Changes	А	107,249	117,551		117,551	U
53 Common Defensive Weapon System	А	2,317	1,994	3,206	5,200	U
54 ID Systems	А	49,443	39,196		39,196	U
55 P-8 Series		14,783	67,416		67,416	U

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

FY 2020

Ident	FY 2020	FY 2020 OCO for Base		OCO for Direct War and Enduring		FY 2020 Total		S e
Code	Quantity Cost	Quantity	Cost	Quantity	Cost	Quantity		
A	8,655				5,488		5,488	U
A								U
A	117,059							U
А	5,616							U
А	15,747							U
А	122,671							U
А	509							U
А	8,767							U
А	169,827							U
А	8,933							U
А					3,498		3,498	U
А	186,022							U
А	16,136							U
А	21,824							U
А	39,762							U
A	162,839				3,406		3,406	U
A	102,107							U
А	2,100				3,274		3,274	U
A	41,437							U
	107,539							U
	A A A A A A A A A A A A A A A A A A A	Ident Code Quantity Cost A 8,655 A 117,059 A 5,616 A 15,747 A 122,671 A 509 A 8,767 A 169,827 A 8,933 A 16,136 A 21,824 A 39,762 A 162,839 A 102,107 A 2,100 A 41,437	FY 2020 Base Code Quantity A A A A 117,059 A A 122,671 A A 169,827 A A 186,022 A A 186,022 A A 10,136 A 21,824 A 39,762 A 162,839 A 102,107 A 2,100 A 41,437	FY 2020 OCO for Base Requirements Code Quantity Cost A 8,655 A 117,059 A 5,616 A 15,747 A 122,671 A 509 A 8,933 A 169,827 A 8,933 A 186,022 A 16,136 A 21,824 A 39,762 A 162,839 A 102,107 A 2,100 A 41,437	Tident Base Code Quantity Cost Quant	Tens	FY 2020 Direct War and Enduring Total Costs OCO for Base Requirements Costs OCO Quantity Cost Quanti	FY 2020 PY 2020 Base Quantity Cost Quantity

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

		FY 2020 Total			
Line No Item Nomenclature	Ident Code 	(Base + OCO) Quantity Cost	С		
36 EP-3 Series	А	14,143	U		
37 P-3 Series	A		U		
38 E-2 Series	A	117,059	U		
39 Trainer A/C Series	A	5,616	U		
40 C-2A	A	15,747	U		
41 C-130 Series	A	122,671	U		
42 FEWSG	A	509	U		
43 Cargo/Transport A/C Series	A	8,767	U		
44 E-6 Series	A	169,827	U		
45 Executive Helicopters Series	A	8,933	U		
46 Special Project Aircraft	A	3,498	U		
47 T-45 Series	A	186,022	U		
48 Power Plant Changes	A	16,136	U		
49 JPATS Series	A	21,824	U		
50 Aviation Life Support Mods	A	39,762	U		
51 Common ECM Equipment	A	166,245	U		
52 Common Avionics Changes	A	102,107	U		
53 Common Defensive Weapon System	A	5,374	U		
54 ID Systems	A	41,437	U		
55 P-8 Series		107,539	U		

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Appropriation: 1506N Aircraft Procurement, Navy

Line No Item Nomenclature	Ident Code	FY 2018 (Base + OCO) Quantity Cost	FY 2019 Base Enacted Quantity Cost	FY 2019 OCO Enacted Quantity Cost	FY 2019 Total Enacted Quantity Cost	s e c
56 MAGTF EW for Aviation	A	10,111	11,590		11,590	U
57 MQ-8 Series		22,593	37,907		37,907	U
58 V-22 (Tilt/Rotor ACFT) Osprey	В	222,524	197,993		197,993	U
59 Next Generation Jammer (NGJ)	А					U
60 F-35 STOVL Series	А	34,963	36,618		36,618	U
61 F-35 CV Series	A	31,689	21,236		21,236	U
62 QRC	А	39,916	101,499	2,410	103,909	U
63 MQ-4 Series	A	13,296	48,278		48,278	U
64 RQ-21 Series	A		6,904	17,215	24,119	U
65 DON Other 4 (TTNT)	А	21,381				U
66 DON Other 6 (TTNT)	А	2,147				U
Total Modification of Aircraft		2,927,345	3,071,125	45,054	3,116,179	
Budget Activity 06: Aircraft Spares and Repair Par	ts					
Aircraft Spares and Repair Parts						
67 Spares and Repair Parts	А	2,195,764	1,880,420		1,880,420	
Total Aircraft Spares and Repair Parts		2,195,764	1,880,420		1,880,420	
Budget Activity 07: Aircraft Support Equip & Facil	ities					
Aircraft Support Equip & Facilities		276 222	400 101		400	
68 Common Ground Equipment	A	376 , 920	409,494		409,494	U

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Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

FY 2020

Line	Ident	FY 2020 Base	FY 2020 OCO for Base Requirements		OCO for Direct War and Enduring Costs		FY 2020 Total OCO		S e	
No Item Nomenclature	Code	Quantity Cost	Quantity 	Cost	Quantity	Cost	Quantity 	Cost	C -	
56 MAGTF EW for Aviation	А	26,536							U	
57 MQ-8 Series		34,686							U	
58 V-22 (Tilt/Rotor ACFT) Osprey	В	325,367							U	
59 Next Generation Jammer (NGJ)	А	6,223							U	
60 F-35 STOVL Series	A	65,585							U	
61 F-35 CV Series	А	15,358							U	
62 QRC	А	165,016				18,458		18,458	U	
63 MQ-4 Series	А	27,994							U	
64 RQ-21 Series	A	66,282							U	
65 DON Other 4 (TTNT)	A								U	
66 DON Other 6 (TTNT)	А								U	
Total Modification of Aircraft		3,497,284				34,124	:	34 , 124		
Budget Activity 06: Aircraft Spares and Repair F	Parts									
Aircraft Spares and Repair Parts										
67 Spares and Repair Parts	А	2,166,788							U	
Total Aircraft Spares and Repair Parts		2,166,788								
Budget Activity 07: Aircraft Support Equip & Fac	cilities									
Aircraft Support Equip & Facilities										
68 Common Ground Equipment	A	491,025							U	

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code	FY 2020 Total (Base + OCO) Quantity Cost	
56 MAGTF EW for Aviation	A	26,536	U
57 MQ-8 Series		34,686	U
58 V-22 (Tilt/Rotor ACFT) Osprey	В	325,367	U
59 Next Generation Jammer (NGJ)	А	6,223	U
60 F-35 STOVL Series	А	65,585	U
61 F-35 CV Series	A	15,358	U
62 QRC	A	183,474	U
63 MQ-4 Series	А	27,994	U
64 RQ-21 Series	A	66,282	U
65 DON Other 4 (TTNT)	A		U
66 DON Other 6 (TTNT)	A		U
Total Modification of Aircraft		3,531,408	
Budget Activity 06: Aircraft Spares and Repair Parts			
Aircraft Spares and Repair Parts			
67 Spares and Repair Parts	A	2,166,788 	
Total Aircraft Spares and Repair Parts		2,166,788	
Budget Activity 07: Aircraft Support Equip & Facilit	ies		
Aircraft Support Equip & Facilities			
68 Common Ground Equipment	А	491,025	U

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Line No Item Nomenclature	Ident Code 	FY 2018 (Base + OCO) Quantity Cost	FY 2019 Base Enacted Quantity Cost	FY 2019 OCO Enacted Quantity Cost	FY 2019 Total Enacted Quantity Cost	S e c
69 Aircraft Industrial Facilities	А	25,076	24,496		24,496	U
70 War Consumables	А	39,614	42,108		42,108	U
71 Other Production Charges	А	1,463	1,444		1,444	U
72 Special Support Equipment	А	48,500	49,489		49,489	U
73 First Destination Transportation	А	1,976	1,951		1,951	U
74 Cancelled Account Adjustments	А	2				U
Total Aircraft Support Equip & Facilities		493,551	528 , 982		528,982	
Total Aircraft Procurement, Navy		20,103,259	20,092,199	232,119	20,324,318	

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

FY 2020

Appropriation: 1506N Aircraft Procurement, Navy

Line	Ident	FY 2020 Base	FY 2020 OCO for Base Requirements	OCO for Direct War and Enduring Costs		S e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost	C _
69 Aircraft Industrial Facilities	А	71,335				U
70 War Consumables	А	41,086			i	U
71 Other Production Charges	A				1	U
72 Special Support Equipment	А	135,740			1	U
73 First Destination Transportation	А	892			1	U
74 Cancelled Account Adjustments	A				1	U
Total Aircraft Support Equip & Facilities		740,078				
Total Aircraft Procurement, Navy		18,522,204		119,045	119,045	

Department of the Navy FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

Appropriation: 1506N Aircraft Procurement, Navy

Line No Item Nomenclature	Ident Code 	FY 2020 Total (Base + OCO) Quantity Cost	S e c
69 Aircraft Industrial Facilities	А	71,335	U
70 War Consumables	А	41,086	U
71 Other Production Charges	А		U
72 Special Support Equipment	А	135,740	U
73 First Destination Transportation	А	892	U
74 Cancelled Account Adjustments	А		U
Total Aircraft Support Equip & Facilities		740,078	
Total Aircraft Procurement, Navy		18,641,249	

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2	01	01	0145	FA-18E/F, Advance Procurement	Volume 1 - 11
3	01	01	0147	Joint Strike Fighter CV	Volume 1 - 15
4	01	01	0147	Joint Strike Fighter CV, Advance Procurement	Volume 1 - 25
5	01	01	0152	JSF STOVL	Volume 1 - 29
6	01	01	0152	JSF STOVL, Advance Procurement	Volume 1 - 39
7	01	01	0158	CH-53K (Heavy Lift)	Volume 1 - 43
8	01	01	0158	CH-53K (Heavy Lift), Advance Procurement	Volume 1 - 55
9	01	01	0164	V-22 (Medium Lift)	Volume 1 - 59
10	01	01	0164	V-22 (Medium Lift), Advance Procurement	Volume 1 - 77
11	01	01	0178	UH-1Y/AH-1Z	Volume 1 - 83
12	01	01	0178	UH-1Y/AH-1Z, Advance Procurement	Volume 1 - 97
13	01	01	0182	MH-60R	Volume 1 - 103
14	01	01	0193	P-8A Poseidon	
15	01	01	0193	P-8A Poseidon, Advance Procurement	Volume 1 - 121
16	01	01	0195	E-2D AHE	Volume 1 - 125

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Appropriation 1506N: Aircraft Procurement, Navy

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	C-40A	0246	01	02	18

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Appropriation 1506N: Aircraft Procurement, Navy

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21	04	01	0416	KC-130J, Advance Procurement	Volume 1 - 169
22	04	01	0417	F-5	Volume 1 - 173
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24	04	01	0442	MQ-4 TRITON, Advance Procurement	Volume 1 - 189
25	04	01	0443	MQ-8 UAV	Volume 1 - 193
26	04	01	0444	STUASLO	Volume 1 - 203
27	04	01	0451	MQ-9A Reaper	Volume 1 - 215
28	04	01	0455	VH-92A Executive Helo	Volume 1 - 223

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Line #	ВА	BSA	Line Item Number	Line Item Title Page
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Appropriation 1506N: Aircraft Procurement, Navy

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32	05	01	0525	F-18 Series	Volume 2 - 47
33	05	01	0528	H-53 Series	
34	05	01	0530	MH-60 Series	Volume 2 - 245
35	05	01	0532	H-1 Series	Volume 2 - 275
36	05	01	0537	EP-3 Series	Volume 2 - 307
37	05	01	0538	P-3 Series	Volume 2 - 323
38	05	01	0544	E-2 Series	Volume 2 - 331
39	05	01	0549	Trainer Acft Series	Volume 2 - 405
40	05	01	0556	C-2A	Volume 2 - 421
41	05	01	0560	C-130 Series	Volume 2 - 435
42	05	01	0561	Flt Elect Wrfr Supt Grp (FEWSG)	Volume 2 - 465
43	05	01	0562	Cargo/Transport Acft Series	Volume 2 - 471
44	05	01	0564	E-6 Series	Volume 2 - 495
45	05	01	0566	Executive Helicopters Series	Volume 2 - 553
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47	05	01	0569	T-45 Series	
48	05	01	0570	Power Plant Changes	Volume 2 - 635

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51	05	01	0576	Common ECM Equipment	Volume 2 - 677
52	05	01	0577	Common Avionics Changes	Volume 2 - 703
53	05	01	0581	Common Defensive Weapon System	
54	05	01	0582	ID Sys	Volume 2 - 745
55	05	01	0586	P-8 Series	Volume 2 - 751
56	05	01	0587	MAGTF EW for Aviation	
57	05	01	0588	MQ-8 Series	Volume 2 - 793
58	05	01	0590	V-22 (Tilt/Rotor Acft) Osprey	Volume 2 - 819
59	05	01	0591	Next Generation Jammer (NGJ)	Volume 2 - 879
60	05	01	0592	F-35 STOVL Series	Volume 2 - 885
61	05	01	0593	F-35 CV Series	Volume 2 - 905
62	05	01	0595	QRC	Volume 2 - 927
63	05	01	0596	MQ-4 Series	Volume 2 - 929
64	05	01	0598	RQ-21 Series	Volume 2 - 937

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Aircraft Industrial Facilities	0715	69	07	01Volume 3 - 81
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C-40A	0246	18	02	01Volume 1 - 141
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Common Avionics Changes	0577	52	05	01 Volume 2 - 703
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EP-3 Series	0537	36	05	01	Volume 2 - 307
Executive Helicopters Series	0566	45	05	01	Volume 2 - 553
F-18 Series	0525	32	05	01	Volume 2 - 47
F-35 CV Series	0593	61	05	01	Volume 2 - 905
F-35 STOVL Series	0592	60	05	01	Volume 2 - 885
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FA-18E/F, Advance Procurement	0145	2	01	01	Volume 1 - 11
First Destination Transportation	0740	73	07	01	Volume 3 - 105
Flt Elect Wrfr Supt Grp (FEWSG)	0561	42	05	01	Volume 2 - 465
H-1 Series	0532	35	05	01	Volume 2 - 275
H-53 Series	0528	33	05	01	Volume 2 - 193
ID Sys	0582	54	05	01	Volume 2 - 745
JSF STOVL	0152	5	01	01	Volume 1 - 29
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MQ-8 UAV	0443	25	04	01 Volume 1 - 193
MQ-9A Reaper	0451	27	04	01 Volume 1 - 215
Next Generation Jammer (NGJ)	0591	59	05	01 Volume 2 - 879
Other Production Charges	0725	71	07	01Volume 3 - 99
P-3 Series	0538	37	05	01 Volume 2 - 323
P-8 Series	0586	55	05	01 Volume 2 - 751
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Special Project Acft	0567	46	05	01Volume 2 - 583
Special Support Equipment	0735	72	07	01Volume 3 - 103
T-45 Series	0569	47	05	01Volume 2 - 591
Trainer Acft Series	0549	39	05	01Volume 2 - 405
UH-1Y/AH-1Z	0178	11	01	01Volume 1 - 83
UH-1Y/AH-1Z, Advance Procurement	0178	12	01	01Volume 1 - 97
V-22 (Medium Lift)	0164	9	01	01Volume 1 - 59
V-22 (Medium Lift), Advance Procurement	0164	10	01	01Volume 1 - 77
V-22 (Tilt/Rotor Acft) Osprey	0590	58	05	01Volume 2 - 819
VH-92A Executive Helo	0455	28	04	01Volume 1 - 223
War Consumables	0720	70	07	01Volume 3 - 89

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0145 / FA-18E/F

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0204136N, 0604269N,

0305207N, 0604270N, 0204154N

Line Item MDAP/MAIS Code: 000

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	ОСО	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	582	24	24	24	-	24	24	12	12	12	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	45,012.728	1,826.192	1,922.275	1,802.911	0.000	1,802.911	1,780.868	1,186.989	1,216.228	1,246.678	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	52.971	53.977	-	53.977	55.128	28.079	28.640	29.213	Continuing	Continuing
Net Procurement (P-1) (\$ in Millions)	45,012.728	1,826.192	1,869.304	1,748.934	0.000	1,748.934	1,725.740	1,158.910	1,187.588	1,217.465	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	52.971	53.977	55.128	-	55.128	28.079	28.640	29.213	29.797	Continuing	Continuing
Total Obligation Authority (\$ in Millions)	45,012.728	1,879.163	1,923.281	1,804.062	0.000	1,804.062	1,753.819	1,187.550	1,216.801	1,247.262	Continuing	Continuing
(The following	Resource Sumr	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget requests	are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	65,803.194	64,476.583	67,209.625	66,166.000	-	66,166.000	67,381.875	87,642.333	89,427.500	91,279.583	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	77,341.457	76,091.333	80,094.792	75,121.292	-	75,121.292	74,202.833	98,915.750	101,352.333	103,889.833	Continuing	Continuing

Description:

The F/A-18E/F Naval Strike Fighter is a twin-engine, mid-wing, multi-mission tactical aircraft. F/A-18E/F can be missionized through selected use of external equipment to accomplish specific fighter or attack missions. This capability allows the Operational Commander more flexibility in employing his tactical aircraft in a dynamic scenario. The primary design mission for the F/A-18E/F is a strike fighter which includes the traditional applications, such as fighter escort and fleet air defense, combined with the attack applications, such as interdiction and close air support. Since the same airframe systems are used on attack missions as well as fighter missions, excellent fighter and self defense capability is retained.

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Exhibit P-40, F	Budget Line	Item Justification:	PB 2020 Navy
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Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0145 / FA-18E/F

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0204136N, 0604269N,

0305207N, 0604270N, 0204154N

Line Item MDAP/MAIS Code: 000

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	1 / 0145 F/A-18 E/F MYP	P-5a, P-21			582 / 45,012.728	24 / 1,826.192	24 / 1,922.275	24 / 1,802.911	- / 0.000	24 / 1,802.911
P-40	Total Gross/Weapon System Cost		582 / 45,012.728	24 / 1,826.192	24 / 1,922.275	24 / 1,802.911	- / 0.000	24 / 1,802.911		

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY2020 budget is for the procurement of 24 F/A-18 E/F aircraft as part of a three-year Multi-year Procurement (MYP), beginning in FY2019, per authority granted in the FY2019 National Defense Authorization Act (NDAA).

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P-1 Line #1

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Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0145 / FA-18E/F

1 / 0145 F/A-18 E/F MYP

ID Code (A=Service Ready, B=Not Service Ready):		М	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	582	24	24	24	-	24
Gross/Weapon System Cost (\$ in Millions)	45,012.728	1,826.192	1,922.275	1,802.911	0.000	1,802.91
Less PY Advance Procurement (\$ in Millions)	-	-	52.971	53.977	-	53.977
Net Procurement (P-1) (\$ in Millions)	45,012.728	1,826.192	1,869.304	1,748.934	0.000	1,748.934
Plus CY Advance Procurement (\$ in Millions)	-	52.971	53.977	55.128	-	55.128
Total Obligation Authority (\$ in Millions)	45,012.728	1,879.163	1,923.281	1,804.062	0.000	1,804.062
(The following Resource Summary rows are for inform	national purposes only. The corre	esponding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	77,341.457	76,091.333	80,094.792	75.121.292	-	75,121.292

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	3		FY 2018			FY 2019		FY	2020 Bas	e	F۱	2020 OC	0	FY	2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Flyaway Cost					,			,										
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	40,392.151	582	23,508.232	38,845.500	24	932.292	40,864.083	24	980.738	40,662.417	24	975.898	-	-	-	40,662.417	24	975.89
1.1.2) CFE Electronics	5,177.000	582	3,013.014	9,970.542	24	239.293	11,167.125	24	268.011	11,110.458	24	266.651	-	-	-	11,110.458	24	266.6
1.1.3) GFE Electronics	1,808.534	582	1,052.567	2,061.417	24	49.474	2,353.083	24	56.474	2,382.542	24	57.181	-	-	-	2,382.542	24	57.18
1.1.4) Engines/Eng Acc ^(†)	4,028.936	1,164	4,689.681	4,296.729	48	206.243	4,402.518	48	211.321	4,489.375	48	215.490	-	-	-	4,489.375	48	215.49
1.1.5) Armament	235.603	582	137.121	480.875	24	11.541	490.667	24	11.776	500.750	24	12.018	-	-	-	500.750	24	12.0
1.1.6) Other GFE	521.617	582	303.581	660.167	24	15.844	672.833	24	16.148	709.333	24	17.024	-	-	-	709.333	24	17.02
1.1.7) Rec Flyaway ECO	719.258	582	418.608	976.333	24	23.432	522.583	24	12.542	1,046.708	24	25.121	-	-	-	1,046.708	24	25.12
Subtotal: Recurring Cost	-	-	33,122.804	-	-	1,478.119	-	-	1,557.010	-	-	1,569.383	-	-	-	-	-	1,569.3
Non Recurring Cost																		
1.2.1) Non-Recur Cost	-	-	1,531.644	-	-	-	-	-	51.900	-	-	-	-	-	-	-	-	-
1.2.2) Ancillary Equip	-	-	3,643.011	-	-	69.319	-	-	4.121	-	-	18.601	-	-	-	-	-	18.60
Subtotal: Non Recurring Cost	-	-	5,174.655	-	-	69.319	-	-	56.021	-	-	18.601	-	-	-	-	-	18.60
Subtotal: Flyaway Cost	-	-	38,297.459	-	-	1,547.438	-	-	1,613.031	-	-	1,587.984	-	-	-	-	-	1,587.98
Support Cost																		
2.1) Airframe PGSE	-	-	352.082	-	-	6.681	-	-	45.444	-	-	6.951	-	-	-	-	-	6.95

Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0145 / FA-18E/F	1 / 0145 F/A-18 E/F MYP

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	Prior Years FY 2018					FY 2019 FY 202			FY 2020 Base			FY 2020 OCO			FY 2020 Total			
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
2.2) Engine PGSE	-	-	128.462	-	-	3.633	-	-	12.525	-	-	3.780	-	-	-	-	-	3.78
2.3) Avionics PGSE	-	-	427.733	-	-	3.900	-	-	13.445	-	-	4.058	-	-	-	-	-	4.05
2.4) Pec Trng Eq	-	-	827.920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5) Pub/Tech Eq	-	-	405.211	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.6) Prod Eng Supt	-	-	2,685.095	-	-	150.788	-	-	135.563	-	-	114.079	-	-	-	-	-	114.07
2.7) Other ILS	-	-	1,888.766	-	-	113.752	-	-	102.267	-	-	86.059	-	-	-	-	-	86.05
Subtotal: Support Cost	-	-	6,715.269	-	-	278.754	-	-	309.244	-	-	214.927	-	-	-	-	-	214.92
Gross/Weapon System Cost	77,341.457	582	45,012.728	76,091.333	24	1,826.192	80,094.792	24	1,922.275	75,121.292	24	1,802.911	-	-	0.000	75,121.292	24	1,802.91

^(†) indicates the presence of a P-5a

Footnotes:

Navy

- (1) The FY2020 budget is for the procurement of 24 F/A-18E/F aircraft as part of a three-year Multi-year Procurement (MYP), beginning in FY2019, per authority granted in the FY2019 National Defense Authorization Act (NDAA).
- (2) The FY2020 budget is for the procurement of 24 F/A-18E/F aircraft as part of a three-year Multi-year Procurement (MYP), beginning in FY2019, per authority granted in the FY2019 National Defense Authorization Act (NDAA).
- (3) Due to aircraft procurement quantity variations, ancillary shortfalls have been realized. Fluctuations in the current ancillary equipment profile support the mitigation plan to eliminate the shortfall.

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Exhibit P-5a, Procurement History and Planning: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0145 / FA-18E/F

1 / 0145 F/A-18 E/F MYP

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2016	Boeing Co. / St. Louis, MO	SS / FPIF	NAVAIR	Feb 2017	Jan 2018	5	39,030.000	Y		Jan 2016
1.1.1) Airframe/CFE ^(†)		2017	Boeing Co. / St. Louis, MO	SS / FPIF	NAVAIR	Sep 2017	Aug 2018	12	43,833.985	Y		Mar 2017
1.1.1) Airframe/CFE ^(†)	1	2017	Boeing Co. / St. Louis, MO	SS / FPIF	NAVAIR	Sep 2017	Aug 2018	2	43,833.985	Υ		Oct 2016
1.1.1) Airframe/CFE ^(†)		2018 ⁽⁴⁾	Boeing Co. / St. Louis, MO	SS / FPIF	NAVAIR	Jun 2018	Apr 2019	24	38,845.500	Υ		Mar 2017
1.1.1) Airframe/CFE ^(†)		2019 ⁽⁵⁾	Boeing Co. / St. Louis, MO	SS / FPIF	NAVAIR	Mar 2019	Apr 2021	24	40,864.083	Υ		Dec 2017
1.1.1) Airframe/CFE ^(†)		2020 (6)	Boeing Co. / St. Louis, MO	SS / FPIF	NAVAIR	Dec 2019	Apr 2022	24	40,662.417	Υ		Dec 2017
1.1.4) Engines/Eng Acc ^(†)		2016	General Electric Company / Lynn, MA	SS / FPIF	NAVAIR	Mar 2017	May 2017	10	4,200.000	Y		Jan 2016
1.1.4) Engines/Eng Acc ^(†)		2017 (7)	General Electric Company / Lynn, MA	SS / FPIF	NAVAIR	Sep 2017	Mar 2018	24	4,014.000	Y		Mar 2017
1.1.4) Engines/Eng Acc ^(†)	1	2017 ⁽⁸⁾	General Electric Company / Lynn, MA	SS / FPIF	NAVAIR	Apr 2017	Jan 2018	4	4,014.000	Y		Oct 2016
1.1.4) Engines/Eng Acc ^(†)		2018 ⁽⁹⁾	General Electric Company / Lynn, MA	SS / FPIF	NAVAIR	Mar 2018	Jul 2018	48	4,296.729	Y		Oct 2017
1.1.4) Engines/Eng Acc ^(†)		2019 (10)	General Electric Company / Lynn, MA	SS / FPIF	NAVAIR	Jun 2019	Jan 2021	48	4,402.518	Y		Dec 2018
1.1.4) Engines/Eng Acc ^(†)		2020 (11)	General Electric Company / Lynn, MA	SS / FPIF	NAVAIR	Dec 2019	Jan 2022	48	4,489.375	Y		Dec 2018

^(†) indicates the presence of a P-21

Footnotes:

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⁽⁴⁾ FY18/Lot 42 will be procured in two seperate buys. Eighteen (18) aircraft were procured in June 2018; the remaining six (6) aircraft are planned to be procured in March 2019.

⁽⁵⁾ Notional Schedule

⁽⁶⁾ Notional Schedule

⁽⁷⁾ Notional Schedule

⁽⁸⁾ Notional Schedule

⁽⁹⁾ Notional Schedule.

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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0145 / FA-18E/F	1 / 0145 F/A-18 E/F MYP

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						In	itial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Boeing Co St. Louis, MO	24	48	72	0	3	3 28	31	0	0	0	0
2	General Electric Company - Lynn, MA	48	120	144	0	3	12	15	0	0	0	0

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

- (12) FY18/Lot 42 will be procured in two separate buys. Eighteen (18) aircraft will be procured in June 2018; the remaining six (6) aircraft are planned to be procured in March 2019. Breaks in delivery schedule in CY19-CY20 are planned to be mitigated by notional FMS deliveries. These deliveries will cover the gaps and maintain the production line without additional cost to the US government.
- (13) FY2017 FY2024 airframe procurements are notional delivery schedule.
- (14) FY2017 FY2024 airframe procurements are notional delivery schedule.
- (15) FY17 FY24 engine procurements are notional delivery schedule.
- (16) FY17 FY24 engine procurements are notional delivery schedule.
- (17) FY17 FY24 engine procurements are notional delivery schedule. Due to contracting timelines, the FY18 engine procurement will be executed in two separate contractual actions, and therefore, will have two separate delivery schedules. The engine delivery schedule shows delivery of only 36 engines. The additional 12 FY18 engines will be delivered Oct Dec CY20, at a rate of 4 per month. These deliveries cannot be displayed on the P-21 due to PDOCS system limitations. Breaks in delivery schedule in CY19 CY20 are planned to be mitigated by notional FMS deliveries. These deliveries will cover the gaps and maintain the production line without additional cost to the US government.
- (18) FY17 FY24 engine procurements are notional delivery schedule.
- (19) FY17 FY24 engine procurements are notional delivery schedule.

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0145 / FA-18E/F

Aircraft

Program Elements for Code B Items: N/A

Other Related Program Elements: 0204136N, 0604269N, 0305207N, 0604270N, 0204154N

Line Item MDAP/MAIS Code: 000

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Gross/Weapon System Cost (\$ in Millions)	-	52.971	53.977	55.128	-	55.128	28.079	28.640	29.213	29.797	Continuing	Continuing
Net Procurement (P-1) (\$ in Millions)	-	52.971	53.977	55.128	-	55.128	28.079	28.640	29.213	29.797	Continuing	Continuing
Total Obligation Authority (\$ in Millions)	-	52.971	53.977	55.128	-	55.128	28.079	28.640	29.213	29.797	Continuing	Continuing

Description:

The F/A-18E/F Naval Strike Fighter is a twin-engine, mid-wing, multi-mission tactical aircraft. F/A-18E/F can be missionized through selected use of external equipment to accomplish specific fighter or attack missions. This capability allows the Operational Commander more flexibility in employing his tactical aircraft in a dynamic scenario. The primary design mission for the F/A-18E/F is a strike fighter which includes the traditional applications, such as fighter escort and fleet air defense, combined with the attack applications, such as interdiction and close air support. Since the same airframe systems are used on attack missions as well as fighter missions, excellent fighter and self defense capability is retained.

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0145 / FA-18E/F

Aircraft

Program Elements for Code B Items: N/A

Other Related Program Elements: 0204136N, 0604269N, 0305207N, 0604270N, 0204154N

Line Item MDAP/MAIS Code: 000

	Exhibits Schedule			Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-10	1 / 0145 F/A-18 E/F MYP			582 / -	24 / 52.971	24 / 53.977	24 / 55.128	- / -	24 / 55.128
P-40	Total Gross/Weapon System Cost			582 / -	24 / 52.971	24 / 53.977	24 / 55.128	- 1 -	24 / 55.128

^{*}Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY2020 Advance Procurement budget of \$55.128 million supports the EOQ/long-lead requirements for procurement of 24 F/A-18 E/F aircraft in FY2020. The FY2020 budget is part of a three-year Multi-year Procurement (MYP), beginning in FY2019, per authority granted in the FY2019 National Defense Authorization Act (NDAA).

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			0.11012/10011/1112			
Exhibit P-10, Advance Procurement	Requirements Analys	is (<i>page 1 - l</i>	Budget Funding Justific	cation): PB 2020 Navy	Date: March 2019	
Appropriation / Budget Activity / Bud 1506N / 01 / 1	lget Sub Activity:	P-1 Line It 0145 / FA-	tem Number / Title: 18E/F		P-5 Number / Title 1 / 0145 F/A-18 E/F	=
First System (2020) Award Date: January 2013	First System (2020) Comp January 2013	letion Date:		Interval Between Syst 0 Months	ems:	
0145 F/A-18 E/F MYP	Production (Month		Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)
Quantity			582	24	24	24
Cost Elements	When Re		Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)
CFE		·				
For FY2019 Airframe EOQ/Long Lead		0	-	41.317	-	-
For FY2020 Airframe EOQ/Long Lead		0	-	-	45.863	-
For FY2021 Airframe EOQ/Long Lead		0	-	-	-	43.000
Total: CFE			-	41.317	45.863	43.000
GFE						
Engines (1)		0	-	10.594	6.938	11.025
Other GFE ⁽²⁾		0	-	1.060	1.176	1.103
Total: GFE			-	11.654	8.114	12.128
Total Advance Procurement/Obligation Author	rity		-	52.971	53.977	55.128

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Exhibit P-10, Advance Procurement Requirements Analysis	(page 2 - Budget Funding Justification): PB 2020 Navy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	P-5 Number / Title:
1506N / 01 / 1	0145 / FA-18E/F	1 / 0145 F/A-18 E/F MYP

1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
				FY 2	020		
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)
CFE							
For FY2019 Airframe EOQ/Long Lead	0						-
For FY2020 Airframe EOQ/Long Lead	0						-
For FY2021 Airframe EOQ/Long Lead	0						43.000
Total: CFE							43.000
GFE							
Engines (1)	1						11.025
Other GFE (2)	1						1.103
Total: GFE							12.128
Total Advance Procurement/Obligation Authority							55.128

Description:

Advance Procurement (AP) funding is required for long lead (24 months or greater) procurement time for various items required to be provided as Government Furnished Equipment (GFE) under the F/A-18E/F airframe contract for installation in the aircraft. There are several GFE components that require AP funding to include Navy Common Ejection Seats (NACES) Cartridge Actuated Devices (CADs)/ Propellant Actuated Devices (PADs), non-NACES CADs/PADs components, and numerous other GFE components all of which are procured and delivered to the F/A-18E/F prime aircraft integrator.

Footnotes:

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 $^{^{(1)}}$ Engine funds long-lead requirements for the F/A-18E/F production program.

⁽²⁾ Other GFE funds long-lead requirements for the F/A-18E/F production program.

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

Aircraft

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

P-1 Line Item Number / Title: 0147 / Joint Strike Fighter CV

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0204146N

Other Related Program Elements: 0204146M, 0207142F

Line Item MDAP/MAIS Code: 198

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	73	10	15	20	-	20	18	29	27	26	151	369
Gross/Weapon System Cost (\$ in Millions)	15,757.464	1,434.932	2,150.369	2,479.012	0.000	2,479.012	2,108.140	3,568.494	3,338.922	3,254.095	21,184.608	55,276.036
Less PY Advance Procurement (\$ in Millions)	1,452.175	80.908	196.411	206.711	-	206.711	280.530	397.843	382.789	249.135	2,548.575	5,795.077
Net Procurement (P-1) (\$ in Millions)	14,305.289	1,354.024	1,953.958	2,272.301	0.000	2,272.301	1,827.610	3,170.651	2,956.133	3,004.960	18,636.033	49,480.959
Plus CY Advance Procurement (\$ in Millions)	1,533.083	263.112	140.010	339.053	-	339.053	443.786	278.323	249.135	243.615	2,304.960	5,795.077
Total Obligation Authority (\$ in Millions)	15,838.372	1,617.136	2,093.968	2,611.354	0.000	2,611.354	2,271.396	3,448.974	3,205.268	3,248.575	20,940.993	55,276.036
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	163.096	176.106	97.612	-	97.612	113.845	212.840	67.887	93.669	Continuing	Continuing
Flyaway Unit Cost (\$ in Thousands)	180,728.493	124,745.500	126,528.933	111,623.900	-	111,623.900	109,914.833	115,157.552	115,766.481	114,340.500	126,091.159	132,865.572
Gross/Weapon System Unit Cost (\$ in Thousands)	215,855.671	143,493.200	143,357.933	123,950.600	-	123,950.600	117,118.889	123,051.517	123,663.778	125,157.500	140,295.417	149,799.556

Description:

Joint Strike Fighter (JSF) program will develop and field a family of aircraft that meets the needs of DoD and allies with the F-35A Conventional Take Off and Landing (CTOL) variant, the F-35B Short Take-Off and Vertical Landing variant, and the F-35C Carrier Variant (CV) with optimum commonality among the three variants to minimize life cycle costs. This is a joint program with no executive service. Service Acquisition Executive (SAE) authority alternates between the Department of the Navy (DON) and the Department of the Air Force (DAF) and currently resides with the Air Force. The F-35s are the next generation of strike fighters which has increased aero-performance, stealth signature and countermeasures. Its advanced avionics, data links and adverse weather precision targeting incorporates the latest technology available. The F-35 has increased range with internal fuel and includes superior weaponry over existing aircraft. The highly supportable, affordable, state of the art aircraft commands and maintains global air superiority. The production cost and quantities are interdependent due to one manufacturer for the program. USAF regular procurement commenced in FY07, DON regular procurement commenced in FY08.

Notes:

- (1) FY10 and prior guantity and funding for F-35B and F-35C were reported under same Budget Line Item (BLI) 0147. Result is 29 F-35B aircraft (6 FY09; and 16 FY10) and 340 F-35C aircraft are included in the BLI 0147 budget. FY11 is the first year F-35B are reported under BLI 0152. CY Advance Procurement for FY10 F-35B aircraft was included in the FY10 F-35C budget. The Advance Procurement Credit for FY10 F-35B aircraft was included in the FY11 F-35B budget.
- (2) The F-35C Carrier Variant (CV) Initial Operational Capability (IOC) is scheduled for February 2019 and Full Rate Production (FRP) is scheduled for 4th quarter 2019.

LI 0147 - Joint Strike Fighter CV Navy

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0147 / Joint Strike Fighter CV

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0204146N

Other Related Program Elements: 0204146M, 0207142F

Line Item MDAP/MAIS Code: 198

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	1 / Joint Strike Fighter-CV	P-5a, P-21			73 / 15,757.464	10 / 1,434.932	15 / 2,150.369	20 / 2,479.012	- / 0.000	20 / 2,479.012
P-40	Total Gross/Weapon System Cost				73 / 15,757.464	10 / 1,434.932	15 / 2,150.369	20 / 2,479.012	- / 0.000	20 / 2,479.012

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY2020 budget request provides funding for 20 F-35C aircraft and associated equipment, support, sustainment and logistical requirements for the Department of the Navy.

LI 0147 - Joint Strike Fighter CV Navy

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Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0147 / Joint Strike Fighter CV	1 / Joint Strike Fighter-CV

ID Code (A=Service Ready, B=Not Service Ready):		ML	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	73	10	15	20	-	20
Gross/Weapon System Cost (\$ in Millions)	15,757.464	1,434.932	2,150.369	2,479.012	0.000	2,479.012
Less PY Advance Procurement (\$ in Millions)	1,452.175	80.908	196.411	206.711	-	206.711
Net Procurement (P-1) (\$ in Millions)	14,305.289	1,354.024	1,953.958	2,272.301	0.000	2,272.301
Plus CY Advance Procurement (\$ in Millions)	1,533.083	263.112	140.010	339.053	-	339.053
Total Obligation Authority (\$ in Millions)	15,838.372	1,617.136	2,093.968	2,611.354	0.000	2,611.354
(The following Resource Summary rows are for information	onal purposes only. The corr	responding budget requests	are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	163.096	176.106	97.612	-	97.612
Gross/Weapon System Unit Cost (\$ in Thousands)	215,855.671	143,493.200	143,357.933	123,950.600	-	123,950.600

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	;		FY 2018			FY 2019		F۱	′ 2020 Bas	se	FY	/ 2020 OC	0	FY	' 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	80,276.151	73	5,860.159	74,682.200	10	746.822	75,280.467	15	1,129.207	73,823.000	20	1,476.460	-	-	-	73,823.000	20	1,476.46
1.1.2) CFE Electronics	25,621.699	73	1,870.384	14,918.000	10	149.180	14,801.667	15	222.025	13,564.000	20	271.280	-	-	-	13,564.000	20	271.28
1.1.3) Engines/Eng Acc ^(†)	28,598.973	73	2,087.725	12,462.600	10	124.626	12,576.111	15	188.642	12,405.000	20	248.100	-	-	-	12,405.000	20	248.10
1.1.4) Rec Flyaway ECO	4,792.589	73	349.859	2,041.300	10	20.413	2,073.111	15	31.097	2,008.000	20	40.160	-	-	-	2,008.000	20	40.16
Subtotal: Recurring Cost	-	-	10,168.127	-	-	1,041.041	-	-	1,570.971	-	-	2,036.000	-	-	-	-	-	2,036.00
Non Recurring Cost																		
1.2.1) Non- Recur Cost ⁽²⁾	-	-	2,629.302	-	-	128.096	-	-	240.218	-	-	85.220	-	-	-	-	-	85.22
1.2.2) Ancillary Equip	-	-	395.751	-	-	78.318	-	-	86.745	-	-	111.258	-	-	-	-	-	111.25
Subtotal: Non Recurring Cost	-	-	3,025.053	-	-	206.414	-	-	326.963	-	-	196.478	-	-	-	-	-	196.47
Subtotal: Flyaway Cost	-	-	13,193.180	-	-	1,247.455	-	-	1,897.934	-	-	2,232.478	-	-	-	-	-	2,232.47
Support Cost																		
2.1) Airframe PGSE	-	-	364.186	-	-	57.640	-	-	63.830	-	-	32.097	-	-	-	-	-	32.09
2.2) Engine PGSE	-	-	203.566	-	-	23.484	-	-	18.450	-	-	12.912	-	-	-	-	-	12.91
2.3) Avionics PGSE	-	-	391.767	-	-	4.865	-	-	16.264	-	-	8.347	-		-	-	-	8.34
2.4) Pec Trng Eq	-	-	333.873	-	-	0.020	-	-	-	-	-	-	-	-	-	-	-	-

LI 0147 - Joint Strike Fighter CV Navy

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Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
The state of the s		Item Number / Title [DODIC]:
1506N / 01 / 1	0147 / Joint Strike Fighter CV	1 / Joint Strike Fighter-CV

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	s		FY 2018			FY 2019		F۱	1 2020 Ba	se	F١	1 2020 OC	0	F	1 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
2.5) ALIS ⁽⁴⁾	-	-	137.642	-	-	1.609	-	-	1.642	-	-	14.614	-	-	-	-	-	14.614
2.6) Other ILS	-	-	575.314	-	-	42.863	-	-	43.084	-	-	16.330	-	-	-	-	-	16.330
2.7) Prod Eng Supt	-	-	553.923	-	-	56.996	-	-	48.843	-	-	41.820	-	-	-	-	-	41.820
2.8) Misc Support	-	-	4.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.9) Depot Standup (5)	-	-	-	-	-	-	-	-	60.322	-	-	120.414	-	-	-	-	-	120.414
Subtotal: Support Cost	-	-	2,564.284	-	-	187.477	-	-	252.435	-	-	246.534	-	-	-	-	-	246.534
Gross/Weapon System Cost	215,855.671	73	15,757.464	143,493.200	10	1,434.932	143,357.933	15	2,150.369	123,950.600	20	2,479.012	-	-	0.000	123,950.600	20	2,479.012

^(†) indicates the presence of a P-5a

Footnotes:

- (1) Airframe Unit Recurring Flyaway (URF) is directly affected by United States Air Force (USAF), Department of the Navy (DON), and International Partners quantity profile changes year over year. Prior to FY11 STOVL and CV aircraft were combined under BLI 0147, of the prior year aircraft 29 were STOVL.
- (2) Non-recurring Costs include such items as DON share of Production Non-Recurring Tooling which is necessary to support planned production ramp-up. In addition, it includes funding for Diminishing Manufacturing Sources ("Life-of-type" part buys), concurrency engineering, technical assistance and Cost Reduction Initiatives (CRI).
- (3) Year to year changes in Ancillary Equipment costs due to changes in Aircraft Quantity. Equipment includes Gen III Helmet Mounted Displays, launchers, and Pilot Flight Equipment.
- (4) Year to year changes in Autonomic Logistics Information System (ALIS) are a result of investments required to support site and squadron stand-ups. Funding in FY2020 supports VFA-136 standup at Naval Air Station Lemoore.
- (5) Depot Standup cost element was added to identify those costs peculiar to depot site activation and associated lay-in material. Theses costs were previously rolled up in Airframe, Engine, and Avionics Peculiar Ground Support Equipment cost elements.

LI 0147 - Joint Strike Fighter CV Navy **UNCLASSIFIED**

Exhibit P-5a, Procurement History and Planning: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

Date: March 2019

Item Number / Title [DODIC]:

1 / Joint Strike Fighter CV

			-							.9		
Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2015	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	Aug 2016	Jan 2017	4	98,048.750	Υ		Jan 2014
1.1.1) Airframe/CFE ^(†)		2016	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	May 2017	Jan 2018	6	86,092.000	Υ		Jan 2015
1.1.1) Airframe/CFE ^(†)		2017	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	Jul 2017	Jan 2019	8	83,048.125	Υ		Jan 2016
1.1.1) Airframe/CFE ^(†)		2018	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	Nov 2018	Jan 2020	10	74,682.200	Υ		Jan 2017
1.1.1) Airframe/CFE ^(†)		2019	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	Mar 2019	Jan 2021	15	75,280.467	Υ		Jan 2018
1.1.1) Airframe/CFE ^(†)		2020	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	Mar 2020	Jan 2022	20	73,823.000	Υ		Jan 2019
1.1.3) Engines/Eng Acc ^(†)		2015	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	Apr 2016	May 2016	4	13,747.000	Υ		Mar 2014
1.1.3) Engines/Eng Acc ^(†)		2016	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	Jul 2016	May 2017	6	13,059.500	Y		Mar 2015
1.1.3) Engines/Eng Acc ^(†)		2017	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	May 2018	May 2018	8	12,863.000	Y		Mar 2016
1.1.3) Engines/Eng Acc ^(†)		2018	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	May 2019	May 2019	10	12,462.600	Υ		Mar 2017
1.1.3) Engines/Eng Acc ^(†)		2019	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	May 2019	May 2020	15	12,576.111	Υ		Mar 2018
1.1.3) Engines/Eng Acc ^(†)		2020	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	May 2020	May 2021	20	12,405.000	Υ		Mar 2019

^(†) indicates the presence of a P-21

Appropriation / Budget Activity / Budget Sub Activity: 1	Exhi	bit F	P-21, Pro	oducti	on Sc	hedul	le: PE	3 2020) Nav	/y														Date	: Ma	rch 20	119				
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LI 0147 - Joint Strike Fighter CV Navy

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LI 0147 - Joint Strike Fighter CV Navy

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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0147 / Joint Strike Fighter CV	1 / Joint Strike Fighter-CV

		Production Rates (Each / Year)			Procurement Leadtime (Months)							
MFF					Initial				Reorder			
Ref #	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	LOCKHEED MARTIN - FT WORTH	6	20	24	8	6	22	28	8	6	22	28
2	UNITED TECH, PRATT & WHITNEY - EAST HARTFORD, CT	6	20	24	8	4	17	21	6	8	12	20

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

 $^{(6)}$ 6 FY18 Congressional Add Aircraft will be delivered in calendar year 2021.

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

P-1 Line Item Number / Title: 0147 / Joint Strike Fighter CV

Program Elements for Code B Items: 0204146N Other Related Program Elements: 0204146M, 0207142F

Line Item MDAP/MAIS Code: 198

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Gross/Weapon System Cost (\$ in Millions)	1,533.083	263.112	140.010	339.053	-	339.053	443.786	278.323	249.135	243.615	2,304.960	5,795.077
Net Procurement (P-1) (\$ in Millions)	1,533.083	263.112	140.010	339.053	-	339.053	443.786	278.323	249.135	243.615	2,304.960	5,795.077
Total Obligation Authority (\$ in Millions)	1,533.083	263.112	140.010	339.053	-	339.053	443.786	278.323	249.135	243.615	2,304.960	5,795.077

Description:

Joint Strike Fighter (JSF) program is developing and fielding a family of aircraft that meets the needs of DoD and allies, with the F-35A Conventional Take Off and Landing (CTOL) variant, F-35B Short Take-Off and Vertical Landing (STOVL) variant and F-35C Carrier Variant (CV). The aircraft will have optimum commonality among three variants to minimize life cycle costs. This is a joint program with no executive service. Service Acquisition Executive (SAE) authority alternates between Department of Navy (DON) and Department of Air Force (DAF) and currently resides with the Air Force. The F-35 is next generation of strike fighters to command and maintain global air superiority. Advance procurement funding will support Airframe and Engine Termination Liability, and long-lead parts and materials necessary to protect delivery schedule of FY 2021 JSF aircraft buy. Additionally advanced procurement funding will provide funding for economic order quantity procurement in support of FY 2021 to FY 2023 JSF aircraft buys.

Notes:

(1) Prior to FY11, F-35B was reported against Budget Line Item 0147. The F-35B now reports under Budget Line Item 0152. CY Advance Procurement for FY10 F-35B aircraft was included in the FY10 F-35B budget. The Advance Procurement Credit for FY10 F-35B aircraft was included in the FY11 F-35B budget.

LI 0147 - Joint Strike Fighter CV Navy **UNCLASSIFIED**

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

P-1 Line Item Number / Title: 0147 / Joint Strike Fighter CV

Program Elements for Code B Items: 0204146N

Other Related Program Elements: 0204146M, 0207142F

Line Item MDAP/MAIS Code: 198

	Exhibits Schedule			Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-10	1 / Joint Strike Fighter-CV			73 / 1,533.083	10 / 263.112	15 / 140.010	20 / 339.053	- / -	20 / 339.053
P-40	Total Gross/Weapon System Cost			73 / 1,533.083	10 / 263.112	15 / 140.010	20 / 339.053	- 1 -	20 / 339.053

^{*}Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY2020 budget requests \$339.053M of Advance Procurement for FY21 long lead materials and FY21 thru FY23 Economic Order Quantity materials. The Advance Procurement (AP) funding requested in FY2020 will support Airframe and Engine long-lead parts and materials necessary to protect the Lot 15 delivery schedule.

LI 0147 - Joint Strike Fighter CV Navy

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Exhibit P-10, Advance Procuremen	t Requirements Analysi	s (page 1 -	- Budget Funding Justi	fication): PB 2020 Navy	Date: March 2019	
Appropriation / Budget Activity / Bo	udget Sub Activity:		Item Number / Title: int Strike Fighter CV		P-5 Number / Titl 1 / Joint Strike Fig	
First System (2020) Award Date: March 2019	First System (2020) Compl March 2022	etion Date:		Interval Between Sy 1 Months	ystems:	
Joint Strike Fighter-CV	Production L		Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)
Quantity			73	10	15	20
Cost Elements	When Rec		Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)
CFE	·					
CFE- Airframe Long Lead		0	1,377.553	110.233	116.208	151.436
For FY19 Economic Order Quantity (Lot 13)		0	-	66.855	-	-
For FY20 Economic Order Quantity (Lot 14)		0	-	66.856	-	-
For FY21 Economic Order Quantity (Lot 15)		0	-	-	-	98.077
For FY22 Economic Order Quantity (Lot 16)		0	-	-	-	30.834
For FY23 Economic Order Quantity (Lot 17)		0	-	-	-	27.689
Total: CFE			1,377.553	243.944	116.208	308.036
GFE						
GFE - Engines Long Lead		0	155.530	19.168	23.802	31.017
Total: GFE			155.530	19.168	23.802	31.017
Total Advance Procurement/Obligation Auth	ority		1,533.083	263.112	140.010	339.053

Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0147 / Joint Strike Fighter CV

1 / Joint Strike Fighter-CV

	0	ounto ingritor o	-		1.7.00	g	
				FY 2	020		
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)
CFE							
CFE- Airframe Long Lead	1						151.436
For FY19 Economic Order Quantity (Lot 13)	0						-
For FY20 Economic Order Quantity (Lot 14)	0	1					-
For FY21 Economic Order Quantity (Lot 15)	0)					98.077
For FY22 Economic Order Quantity (Lot 16)	0)					30.834
For FY23 Economic Order Quantity (Lot 17)	0)					27.689
Total: CFE							308.036
GFE							
GFE - Engines Long Lead	1						31.017
Total: GFE							31.017
Total Advance Procurement/Obligation Authority							339.053

Description:

Advance procurement funding will support Airframe and Engine Termination Liability, and long-lead parts and materials necessary to protect delivery schedule of FY 2021 JSF aircraft buy. Additionally advanced procurement funding will provide funding for economic order quantity procurement in support of FY 2021 to FY 2023 JSF aircraft buys.

LI 0147 - Joint Strike Fighter CV Navy

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0152 / JSF STOVL

Aircraft

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0204146M

Other Related Program Elements: 0204146N, 0207142F

Line Item MDAP/MAIS Code: 198

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	60	24	22	10	-	10	15	17	20	20	136	324
Gross/Weapon System Cost (\$ in Millions)	10,640.680	3,185.195	2,850.311	1,661.713	0.000	1,661.713	1,967.950	2,243.672	2,705.528	2,879.021	20,762.973	48,897.043
Less PY Advance Procurement (\$ in Millions)	1,289.576	233.648	322.264	319.678	-	319.678	249.554	260.785	306.054	231.317	2,090.123	5,302.999
Net Procurement (P-1) (\$ in Millions)	9,351.104	2,951.547	2,528.047	1,342.035	0.000	1,342.035	1,718.396	1,982.887	2,399.474	2,647.704	18,672.850	43,594.044
Plus CY Advance Procurement (\$ in Millions)	1,523.224	413.450	228.492	291.804	-	291.804	303.035	221.554	231.317	234.344	1,855.779	5,302.999
Total Obligation Authority (\$ in Millions)	10,874.328	3,364.997	2,756.539	1,633.839	0.000	1,633.839	2,021.431	2,204.441	2,630.791	2,882.048	20,528.629	48,897.043
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	393.509	227.853	229.979	-	229.979	281.587	126.834	136.597	74.418	3,363.198	4,833.975
Flyaway Unit Cost (\$ in Thousands)	146,548.300	120,665.250	117,555.909	121,489.900	-	121,489.900	114,668.333	119,267.235	121,521.400	127,064.900	138,651.346	132,919.352
Gross/Weapon System Unit Cost (\$ in Thousands)	177,344.667	132,716.458	129,559.591	166,171.300	-	166,171.300	131,196.667	131,980.706	135,276.400	143,951.050	152,668.919	150,916.799

Description:

Joint Strike Fighter (JSF) program will develop and field a family of aircraft that meets the needs of DoD and allies with the F-35A Conventional Take Off and Landing (CTOL) variant, the F-35B Short Take-Off and Vertical Landing (STOVL) variant, and the F-35C Carrier Variant (CV) with optimum commonality among the three variants to minimize life cycle costs. This is a joint program with no executive service. Service Acquisition Executive (SAE) authority alternates between the Department of the Navy (DON) and the Department of the Air Force and currently resides with the Air Force. The F-35s are the next generation of strike fighters which has increased aero-performance, stealth signature and countermeasures. Its advanced avionics, data links and adverse weather precision targeting incorporates the latest technology available. The F-35 has increased range with internal fuel and includes superior weaponry over existing aircraft. The highly supportable, affordable, state of the art aircraft commands and maintains global air superiority. The production cost and quantities are interdependent due to one manufacturer for the program. USAF regular procurement commenced in FY07, DON regular procurement commenced in FY08.

Notes:

- (1) FY10 and prior guantity and funding for F-35B and F-35C were reported under same Budget Line Item 0147. Result is 29 F-35B aircraft (6 FY08; 7 FY09; and 16 FY10) are included in the BLI 0147 Prior Year Column for a total of 353 F-35B aircraft (29-BLI 0147, 324-BLI 0152). The F-35C budget continues to report under BLI 0147.
- (2) Initial Operational Capability (IOC) occured in July 2015 and Full Rate Production (FRP) is scheduled for 4th quarter 2019.

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P-1 Line #5

LI 0152 - JSF STOVL Page 1 of 10 Navy

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0152 / JSF STOVL

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0204146M

Other Related Program Elements: 0204146N, 0207142F

Line Item MDAP/MAIS Code: 198

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	1 / Joint Strike Fighter - STOVL	P-5a, P-21			60 / 10,640.680	24 / 3,185.195	22 / 2,850.311	10 / 1,661.713	- / 0.000	10 / 1,661.713
P-40	Total Gross/Weapon System Cost				60 / 10,640.680	24 / 3,185.195	22 / 2,850.311	10 / 1,661.713	- / 0.000	10 / 1,661.713

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY20 budget provides funding for 10 F-35B STOVL aircraft for the Marine Corps and associated equipment, support, sustainment and logistical requirements.

LI 0152 - JSF STOVL
Navy

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Page 2 of 10
P-1 Line #5

Volume 1 - 30

Date: March 2019 Exhibit P-5, Cost Analysis: PB 2020 Navy Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 1506N / 01 / 1 0152 / JSF STOVL 1 / Joint Strike Fighter - STOVL

MDAP/MAIS Code:

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	60	24	22	10	-	10
Gross/Weapon System Cost (\$ in Millions)	10,640.680	3,185.195	2,850.311	1,661.713	0.000	1,661.713
Less PY Advance Procurement (\$ in Millions)	1,289.576	233.648	322.264	319.678	-	319.678
Net Procurement (P-1) (\$ in Millions)	9,351.104	2,951.547	2,528.047	1,342.035	0.000	1,342.035
Plus CY Advance Procurement (\$ in Millions)	1,523.224	413.450	228.492	291.804	-	291.804
Total Obligation Authority (\$ in Millions)	10,874.328	3,364.997	2,756.539	1,633.839	0.000	1,633.839
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	s are documented elsewher	e.)		
Initial Spares (\$ in Millions)	-	393.509	227.853	229.979	-	229.979
Gross/Weapon System Unit Cost (\$ in Thousands)	177,344.667	132,716.458	129,559.591	166,171.300	-	166,171.300

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready):

	F	Prior Years	3		FY 2018			FY 2019		FY	2020 Bas	se e	FY	/ 2020 OC	0	FY	2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	'				'		'	'		<u>'</u>			'				'	
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	78,796.783	60	4,727.807	63,901.083	24	1,533.626	63,976.273	22	1,407.478	64,441.900	10	644.419	-	-	-	64,441.900	10	644.4
1.1.2) CFE Electronics	15,334.350	60	920.061	14,618.167	24	350.836	14,383.909	22	316.446	14,244.700	10	142.447	-	-	-	14,244.700	10	142.44
1.1.3) Engines/Eng Acc ^(†) (2)	31,376.267	60	1,882.576	27,467.708	24	659.225	27,775.500	22	611.061	28,755.000	10	287.550	-	-	-	28,755.000	10	287.55
1.1.4) Rec Flyaway ECO	2,695.767	60	161.746	2,119.750	24	50.874	2,142.700	22	47.139	2,139.000	10	21.390	-	-	-	2,139.000	10	21.39
Subtotal: Recurring Cost	-	-	7,692.190	-	-	2,594.561	-	-	2,382.124	-	-	1,095.806	-	-	-	-	-	1,095.80
Non Recurring Cost																		
1.2.1) Non- Recur Cost ⁽³⁾	-	-	700.299	-	-	175.919	-	-	80.386	-	-	61.833	-	-	-	-	-	61.83
1.2.2) Ancillary Equip	-	-	400.409	-	-	125.486	-	-	123.720	-	-	57.260	-	-	-	-	-	57.26
Subtotal: Non Recurring Cost	-	-	1,100.708	-	-	301.405	-	-	204.106	-	-	119.093	-	-	-	-		119.09
Subtotal: Flyaway Cost	-	-	8,792.898	-	-	2,895.966	-	-	2,586.230	-	-	1,214.899	-	-	-	-	-	1,214.89
Support Cost																		
2.1) Airframe PGSE (4)	-	-	338.180	-	-	91.484	-	-	73.017	-	-	93.964	-	-	-	-	-	93.96
2.2) Engine PGSE	-	-	145.954	-	-	23.934	-	-	19.291	-	-	31.474	-	-	-	-	-	31.47
2.3) Avionics PGSE	-	-	326.412	-	-	4.618	-	-	7.121	-	-	13.678	-	-	-	-	-	13.67
2.4) Pec Trng Eq (5)	-	-	244.536	-	-	55.825	-	-	19.030	-	_	41.536	-	-	-	_	_	41.53

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LI 0152 - JSF STOVL Page 3 of 10 Navy

Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
		Item Number / Title [DODIC]:
1506N / 01 / 1	0152 / JSF STOVL	1 / Joint Strike Fighter - STOVL

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding

MDAP/MAIS Code:

110to: Cabtotalo di Totalo					,													
	F	Prior Years	S		FY 2018			FY 2019		F۱	/ 2020 Bas	se	F'	Y 2020 OC	0	F	/ 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
2.5) ALIS ⁽⁶⁾	-	-	49.702	-	-	14.868	-	-	7.888	-	-	7.903	-	-	-	-	-	7.90
2.6) Other ILS	-	-	434.187	-	-	49.437	-	-	23.148	-	-	22.044	-	-	-	-	-	22.04
2.7) Prod Eng Supt	-	-	308.811	-	-	49.063	-	-	41.074	-	-	41.820	-	-	-	-	-	41.82
2.8) Depot Standup (7)	-	-	-	-	-	-	-	-	73.512	-	-	194.395	-	-	-	-	-	194.39
Subtotal: Support Cost	-	-	1,847.782	-	-	289.229	-	-	264.081	-	-	446.814	-	-	-	-	-	446.814
Gross/Weapon System Cost	177,344.667	60	10,640.680	132,716.458	24	3,185.195	129,559.591	22	2,850.311	166,171.300	10	1,661.713	-	-	0.000	166,171.300	10	1,661.713

^(†) indicates the presence of a P-5a

ID Code (A=Service Ready, B=Not Service Ready) :

Footnotes:

- (1) Airframe Unit Recurring Flyaway (URF) is directly affected by United States Air Force (USAF), Department of the Navy (DON), and International Partners quantity profile changes year over year. Increase in FY20 Airframe unit cost as compared to FY19 is a result of lower procurement quantity in FY20.
- (2) Unit Cost Increase from FY2019 to FY2020 to Engine is driven by foreign currency exchange fluctuations as a result of subcontractor components manufactured in the United Kingdom as well as lower procurement quantity as compared to FY19.
- (3) Non-recurring Costs include such items as DON share of Production Non-Recurring Tooling which is necessary to support planned production ramp-up. In addition, it includes funding for Diminishing Manufacturing Sources ("Life-of-type" part buys), concurrency engineering, technical assistance and Cost Reduction Initiatives (CRI).
- (4) Airframe, Engine, and Avionics Peculiar Ground Support Equipment (PGSE) increases from FY2019 to FY2020 in this budget request to reflect inclusion of costs associated with provisioning of Intermediate Level maintenance capability, as well as VMFA-223 first operational squadron standup at Marine Corps Air Station (MCAS) Cherry Point and one Unit Deployment Program package for MCAS lwakuni.
- (5) Peculiar Training Equipment increases from FY2019 to FY2020 in this budget reflect inclusion of costs associated with procurement for four Full Mission Simulators (FMS) and the Multi-Spectral Database (MSDB) standup at Marine Corps Air Station Cherry Point.
- (6) Year to year changes in Autonomic Logistics Information System (ALIS) are a result of investments required to support site and squadron stand-ups.
- (7) Depot Standup cost element was added to identify those costs peculiar to depot site activation and associated lay-in material. Theses costs were previously rolled up in Airframe, Engine, and Avionics Peculiar Ground Support Equipment cost elements. Cost incorporate acceleration of depot standup to support depot maintenance of aircraft and repair of aircraft components.

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 P-1 Line #5

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Exhibit P-5a, Procurement History and Planning: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

Date: March 2019

Item Number / Title [DODIC]:

1 / Joint Strike Fighter - STOVL

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2015	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	Aug 2016	Jan 2017	6	83,044.667	Y		Jan 2014
1.1.1) Airframe/CFE ^(†)		2016	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	May 2017	Jan 2018	15	71,805.800	Y		Jan 2015
1.1.1) Airframe/CFE ^(†)		2017	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	Jul 2017	Jan 2019	18	69,605.000	Y		Jan 2016
1.1.1) Airframe/CFE ^(†)		2018	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	Nov 2018	Jan 2020	24	63,901.083	Y		Jan 2017
1.1.1) Airframe/CFE ^(†)		2019	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	Mar 2019	Jan 2021	22	63,976.273	Y		Jan 2018
1.1.1) Airframe/CFE ^(†)		2020	LOCKHEED MARTIN / FT WORTH	SS / FPIF	NAVAIR	Mar 2020	Jan 2022	10	64,441.900	Y		Jan 2019
1.1.3) Engines/Eng Acc ^(†)		2015	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	Apr 2016	May 2017	6	32,492.667	Y		Mar 2014
1.1.3) Engines/Eng Acc ^(†)		2016	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	Jul 2016	May 2017	15	30,816.133	Y		Mar 2015
1.1.3) Engines/Eng Acc ^(†)		2017	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	May 2018	May 2018	18	28,890.889	Y		Mar 2016
1.1.3) Engines/Eng Acc ^(†)		2018	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	May 2019	May 2019	24	27,467.708	Y		Mar 2017
1.1.3) Engines/Eng Acc ^(†)		2019	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	May 2019	May 2020	22	27,775.500	Y		Mar 2018
1.1.3) Engines/Eng Acc ^(†)		2020	UNITED TECH, PRATT & WHITNEY / EAST HARTFORD, CT	SS / FPIF	NAVAIR	May 2020	May 2021	10	28,755.000	Y		Mar 2019

^(†) indicates the presence of a P-21

LI 0152 - JSF STOVL Navy

C # FY SERVICE PROC OCT AS OF T 1.1.1) Airframe/CFE (1) Prior Years Deliveries: 21 1 2015 NAVY 6 0 6 1 2016 NAVY 15 0 15 1 2017 NAVY 18 0 18 1 2018 NAVY 24 (8) 0 24 1 2019 NAVY 22 0 22 1 2020 NAVY 10 0 10 1.1.3) Engines/Eng Acc (2)	O N D J C O E A T V C N			N D J F O E A E V C N B	Item Number / Title [DODIC]: 1 / Joint Strike Fighter - STOVL	EC
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1.1.3) Engines/Eng Acc ⁽²⁾						
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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0152 / JSF STOVL	1 / Joint Strike Fighter - STOVL

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						lr	itial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	LOCKHEED MARTIN - FT WORTH	4	20	24	8		5 22	28	8	6	22	28
2	UNITED TECH, PRATT & WHITNEY - EAST HARTFORD, CT	4	20	24	8		17	21	6	8	12	20

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽⁸⁾ 4 FY 2018 Congressional Add Aircraft will deliver in CY2021

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Navy

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P-1 Line #5

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0152 / JSF STOVL

Aircraft

Program Elements for Code B Items: 0204146M

Other Related Program Elements: 0204146N, 0207142F

Line Item MDAP/MAIS Code: 198

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Gross/Weapon System Cost (\$ in Millions)	1,523.224	413.450	228.492	291.804	-	291.804	303.035	221.554	231.317	234.344	1,855.779	5,302.999
Net Procurement (P-1) (\$ in Millions)	1,523.224	413.450	228.492	291.804	-	291.804	303.035	221.554	231.317	234.344	1,855.779	5,302.999
Total Obligation Authority (\$ in Millions)	1,523.224	413.450	228.492	291.804	-	291.804	303.035	221.554	231.317	234.344	1,855.779	5,302.999

Description:

Joint Strike Fighter (JSF) program is developing and fielding a family of aircraft that meets the needs of DoD and allies, with the F-35A Conventional Take Off and Landing (CTOL) variant, F-35B Short Take-Off and Vertical Landing (STOVL) variant and F-35C Carrier Variant (CV). The aircraft will have optimum commonality among three variants to minimize life cycle costs. This is a joint program with no executive service. Service Acquisition Executive (SAE) authority alternates between Department of Navy (DON) and Department of Air Force and currently resides with the Air Force. The F-35 is next generation of strike fighters to command and maintain global air superiority. Advance procurement funding will support Airframe and Engine Termination Liability, and long-lead parts and materials necessary to protect delivery schedule of FY2020 JSF aircraft. Additionally advanced procurement funding will provide funding for economic order quantity procurement in support of FY 2021 to FY 2023 JSF aircraft buys.

Note:

(1) F-35B USMC variant Budget Line Item 0152 was created in FY11, prior years budgets were reported under Budget Line Item 0147. The F-35C continues to report under Budget Line Item 0147. CY Advance Procurement for FY2010 F-35B aircraft was included in the FY2011 F-35C budget. The Advance Procurement Credit for FY2010 F-35B aircraft was included in the FY2011 F-35B budget.

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0152 / JSF STOVL

P-1 Line Item Number / Title:

Aircraft

Program Elements for Code B Items: 0204146M

Other Related Program Elements: 0204146N, 0207142F

Line Item MDAP/MAIS Code: 198

	Exhibits Schedule			Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-10	1 / Joint Strike Fighter - STOVL			60 / 1,523.224	24 / 413.450	22 / 228.492	10 / 291.804	- / -	10 / 291.804
P-40	Total Gross/Weapon System Cost			60 / 1,523.224	24 / 413.450	22 / 228.492	10 / 291.804	- 1 -	10 / 291.804

^{*}Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY2020 budget requests \$291.804M of Advance Procurement for FY21 long lead materials and FY21 thru FY23 Economic Order Quantity materials. The Advance Procurement (AP) funding requested in FY2020 will support Airframe and Engine long-lead parts and materials necessary to protect the Lot 15 delivery schedule.

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Exhibit P-10, Advance Procurement	Requirements Analysis (page 1 -	- Budget Funding Justi	<i>fication</i>): PB 2020 Navy	Date: March 2019	
Appropriation / Budget Activity / Bud 1506N / 01 / 1	-		Item Number / Title: SF STOVL		P-5 Number / Title 1 / Joint Strike Fig	
First System (2020) Award Date: March 2017	First System (2020) Completion March 2022	n Date:		Interval Between Sy 1 Months	stems:	
Joint Strike Fighter - STOVL	Production Lead	time	Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)
Quantity			60	24	22	10
Cost Elements	When Require	ed	Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)
CFE	·				<u>.</u>	
CFE-Airframe Long Lead		0	1,133.902	170.549	164.514	118.839
For FY19 Economic Order Quantity (Lot 13)		0	-	91.489	-	-
For FY20 Economic Order Quantity (Lot 14)		0	-	91.489	-	-
For FY21 Economic Order Quantity (Lot 15)		0	-	-	-	84.500
For FY22 Economic Order Quantity (Lot 16)		0	-	-	-	21.125
For FY23 Economic Order Quantity (Lot 17)		0	-	-	-	21.125
Total: CFE			1,133.902	353.527	164.514	245.589
GFE	,					
GFE- Engines Long Lead		0	389.322	59.923	63.978	46.215
Total: GFE			389.322	59.923	63.978	46.21
Total Advance Procurement/Obligation Autho	rity		1,523.224	413.450	228.492	291.804

LI 0152 - JSF STOVL Navy

Exhibit P-10, Advance Procurement Requirements Analysis	(page 2 - Budget Funding Justification): PB 2020 Navy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	P-5 Number / Title:
1506N / 01 / 1	0152 / JSF STOVL	1 / Joint Strike Fighter - STOVL

				FY 2	020		,
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)
CFE							
CFE-Airframe Long Lead	1						118.839
For FY19 Economic Order Quantity (Lot 13)	0						-
For FY20 Economic Order Quantity (Lot 14)	0						-
For FY21 Economic Order Quantity (Lot 15)	0						84.500
For FY22 Economic Order Quantity (Lot 16)	0						21.125
For FY23 Economic Order Quantity (Lot 17)	0						21.125
Total: CFE							245.589
GFE	,						
GFE- Engines Long Lead	1						46.215
Total: GFE			<u> </u>				46.215
Total Advance Procurement/Obligation Authority							291.804

Description:

Joint Strike Fighter (JSF) program is developing and fielding a family of aircraft that meets the needs of DoD and allies, with the F-35A Conventional Take Off and Landing (CTOL) variant, F-35B Short Take-Off and Vertical Landing (STOVL) variant and F-35C Carrier Variant (CV). The aircraft will have optimum commonality among three variants to minimize life cycle costs. This is a joint program with no executive service. Service Acquisition Executive (SAE) authority alternates between Department of Navy (DON) and Department of Air Force (DAF) and currently resides with the Air Force. The F-35 is next generation of strike fighters to command and maintain global air superiority. Advance procurement funding will support Airframe and Engine Termination Liability, and long-lead parts and materials necessary to protect delivery schedule of FY 2021 JSF aircraft buy. Additionally advanced procurement funding will provide funding for economic order quantity procurement in support of FY 2021 to FY 2023 JSF aircraft buys.

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0158 / CH-53K (Heavy Lift)

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): B Program Elements for Code B Items: 0605212N

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 390

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	2	6	8	6	-	6	12	19	18	19	104	194
Gross/Weapon System Cost (\$ in Millions)	385.882	874.474	1,154.645	968.955	0.000	968.955	1,543.802	2,270.898	2,065.520	2,365.559	11,962.391	23,592.126
Less PY Advance Procurement (\$ in Millions)	41.267	71.869	147.046	161.079	-	161.079	215.014	338.336	321.863	444.089	2,147.362	3,887.925
Net Procurement (P-1) (\$ in Millions)	344.615	802.605	1,007.599	807.876	0.000	807.876	1,328.788	1,932.562	1,743.657	1,921.470	9,815.029	19,704.201
Plus CY Advance Procurement (\$ in Millions)	113.136	147.046	161.079	215.014	-	215.014	338.336	321.863	444.089	411.164	1,736.198	3,887.925
Total Obligation Authority (\$ in Millions)	457.751	949.651	1,168.678	1,022.890	0.000	1,022.890	1,667.124	2,254.425	2,187.746	2,332.634	11,551.227	23,592.126
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	77.103	59.040	98.824	-	98.824	72.087	34.466	14.961	16.729	338.075	711.285
Flyaway Unit Cost (\$ in Thousands)	145,852.000	130,846.667	118,646.375	123,975.333	-	123,975.333	112,954.750	107,413.263	105,161.833	107,330.684	104,768.587	108,217.758
Gross/Weapon System Unit Cost (\$ in Thousands)	192,941.000	145,745.667	144,330.625	161,492.500	-	161,492.500	128,650.167	119,520.947	114,751.111	124,503.105	115,022.990	121,608.897

Description:

The CH-53 is the only marinized heavy-lift helicopter in the world and is the Marine Corps only heavy-lift helicopter. The CH-53 mission is the conduct of expeditionary heavy-lift assault transport of armored vehicles, equipment and personnel to support distributed operations deep inland from a sea-based center of operations. The CH-53E "Super Stallion", introduced in 1980, has developed performance degradation, fatigue life, interoperability, maintenance supportability, and other operational concerns.

The CH-53K "King Stallion" is designed to address these concerns and support Marine Air-Ground Task Force heavy-lift requirements in the 21st century joint environment, and is the only heavy-lift platform that can lift the Marine Air-Ground Task Force ashore. The CH-53K provides significant improvements in range and payload, performance, cargo handling, turn-around times, reliability and maintainability, interoperability and survivability.

Total aircraft quantities for the CH-53K program are 205 helicopters. This currently includes one Ground Test Vehicle (GTV) and four Engineering Development Models (EDMs) for System Development and Demonstration (SDD) which are purchased with Research, Development, Test & Evaluation (RDT&E) funds. Of the remaining 200 aircraft, six were System Demonstration Test Articles (SDTAs) and are incrementally funded using RDT&E funds and 194 aircraft funded with Aircraft Procurement, Navy (APN). Development contract overruns resulted in insufficient funding levels to continue work on SDTA 5&6 and the contract was modified to avoid further expenditure. The program will discontinue SDTA 5&6 efforts and DD-250 SDTA 5&6 parts to become Government property. Only SDTA 1-4 will remain to be utilized as previously planned. The program of record of aircraft quantity remains 200, four of which are SDTA and 196 aircraft to be APN funded.

The CH-53K System Development and Demonstration program received a successful Milestone C decision on 4 April 2017. Initial Operational Test & Evaluation (IOT&E) is scheduled to begin 3rd quarter of FY 2021, with Initial Operational Capability (IOC) to start 4th quarter of FY 2021.

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0158 / CH-53K (Heavy Lift)

Aircraft

Program Elements for Code B Items: 0605212N

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 390

ID Code (A=Service Ready, B=Not Service Ready): B

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	1 / CH-53K (Heavy Lift)	P-5a, P-21			2 / 385.882	6 / 874.474	8 / 1,154.645	6 / 968.955	- / 0.000	6 / 968.955
P-40	Total Gross/Weapon System Cost				2 / 385.882	6 / 874.474	8 / 1,154.645	6 / 968.955	- / 0.000	6 / 968.955

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

This budget exhibit reflects cost estimate based on LRIP 1 Airframe, LRIP 1/2 Engine, GFE contract awards; and the refinement of Depot Capability Establishment. FY2018 includes two congressional add aircraft and FY2019 reflects enacted funding from the 2019 Department of Defense Appropriations Act.

FY2020 APN funds the procurement of Low Rate Initial Production (LRIP) Lot 4 (six aircraft), as well as advance procurement in support of LRIP Lot 5 (12 aircraft) long-lead materials.

Engineering Change Order (ECO) requirements are provided to address Contractor Furnished Equipment (CFE)/Government Furnished Equipment (GFE) correction of deficiencies found in flight test and incorporating them into the

production configuration during Low Rate Initial Production (LRIP).

Non-recurring Engineering (NRE) efforts are required for production tooling, obsolescence issues and supplier production line improvements.

Airframe, Engine and Avionics Peculiar Ground Support Equipment (PGSE) requirements are derived by three factors: scheduled stand-up of CONUS Main Operating Base; Initial Operating Capability (IOC) of sea-based deployment of four plane detachment; and establishment of Depot repair capability for the entire weapons system. A phased approach is being utilized to procure the required PGSE to support IOC plus four years as required by 10 US Code 2464/Navy Support Date (NSD). The cost in each year is based on the specific equipment being purchased for that year's capability establishment, not cost growth.

The Training System requirements are directly aligned to the scheduled site stand-up of two CONUS-based and one OCONUS-based Primary Deployment Sites.

Publications / Tech Data requirements are aligned with Intermediate (I) and Depot (D) level stand-up plans and support I and D level repair capabilities to meet IOC and 10 US Code 2464/NSD requirements.

Field Activities requirements increase in FY2020 to support the progression of production. Field Activities requirements are annualized efforts required to provide acquisition support, aircraft configuration management, integrated logistics planning and analysis, and engineering support for production line improvements and incorporation of airframe changes and upgrades.

Other ILS requirements are based on the program transition plan from interim to organic support, the contractor support requirement for operational site activations, and the contractor support requirement for I and D level repair capability stand-up.

Production Engineering Support requirements are for Prime Contractor's non-touch production support required for aircraft deliveries and is budgeted on an annualized basis, as it is not aircraft quantity related.

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LI 0158 - CH-53K (Heavy Lift) Navy

P-1 Line #7

Volume 1 - 44

Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0158 / CH-53K (Heavy Lift)

Date: March 2019

Item Number / Title [DODIC]:
1 / CH-53K (Heavy Lift)

		` ,			,	
ID Code (A=Service Ready, B=Not Service Ready):		MD	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	2	6	8	6	-	6
Gross/Weapon System Cost (\$ in Millions)	385.882	874.474	1,154.645	968.955	0.000	968.955
Less PY Advance Procurement (\$ in Millions)	41.267	71.869	147.046	161.079	-	161.079
Net Procurement (P-1) (\$ in Millions)	344.615	802.605	1,007.599	807.876	0.000	807.876
Plus CY Advance Procurement (\$ in Millions)	113.136	147.046	161.079	215.014	-	215.014
Total Obligation Authority (\$ in Millions)	457.751	949.651	1,168.678	1,022.890	0.000	1,022.890
(The following Resource Summary rows are for informa	tional purposes only. The corre	sponding budget requests	are documented elsewhere	e.)		
Initial Spares (\$ in Millions)	-	77.103	59.040	98.824	-	98.824
Gross/Weapon System Unit Cost (\$ in Thousands)	192.941.000	145.745.667	144.330.625	161.492.500	-	161.492.500

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	;		FY 2018			FY 2019		F۱	' 2020 Bas	e	FY	2020 OC	:0	F۱	2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	'	'			'		,	'		'			'		'	'	'	
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	107,513.500	2	215.027	100,648.667	6	603.892	91,495.000	8	731.960	93,224.167	6	559.345	-	-	-	93,224.167	6	559.3
1.1.2) Engines ^{(†) (2)}	6,149.000	6	36.894	5,174.500	18	93.141	4,191.333	24	100.592	3,853.944	18	69.371	-	-	-	3,853.944	18	69.3
1.1.3) CFE Mission Electronics ⁽³⁾	-	-	4.807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.1.4) GFE Electronics	-	-	13.152	-	-	61.059	-	-	60.221	-	-	46.210	-	-	-	-	-	46.
1.1.5) Armament	-	-	0.213	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.1.6) Other GFE (5)	-	-	0.180	-	-	4.042	-	-	5.378	-	-	4.181	-	-	-	-	-	4.
1.1.7) Rec Flyaway ECO ⁽⁶⁾	-	-	18.375	-	-	17.969	-	-	34.427	-	-	20.198	-	-	-	-	-	20.
Subtotal: Recurring Cost	-	-	288.648	-	-	780.103	-	-	932.578	-	-	699.305	-	-	-	-	-	699.
Non Recurring Cost																		
1.2.1) Non-Recurring Cost ⁽⁷⁾	-	-	3.056	-	-	4.977	-	-	16.593	-	-	44.547	-	-	-	-	-	44.
Subtotal: Non Recurring Cost	-	-	3.056	-	-	4.977	-	-	16.593	-	-	44.547	-	=	-	-	-	44.
Subtotal: Flyaway Cost	-	-	291.704	-	-	785.080	-	-	949.171	-	-	743.852	-	-	-	-	-	743.
Support Cost																		
2.1) Airframe PGSE (8)	-	-	21.870	-	-	33.237	-	-	39.625	-	-	40.615	-	-	-	-	-	40.

LI 0158 - CH-53K (Heavy Lift) Navy UNCLASSIFIED
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P-1 Line #7

Volume 1 - 45

Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
		Item Number / Title [DODIC]:
1506N / 01 / 1	0158 / CH-53K (Heavy Lift)	1 / CH-53K (Heavy Lift)

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	3		FY 2018			FY 2019		FY	' 2020 Ba	se	F	/ 2020 OC	0	F۱	/ 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
2.2) Engine PGSE (9)	-	-	6.718	-	-	7.172	-	-	5.020	-	-	5.146	-	-	-	-	-	5.146
2.3) Avionics PGSE (10)	-	-	11.776	-	-	4.867	-	-	13.742	-	-	14.085	-	-	-	-	-	14.08
2.4) Peculiar Training Equip ⁽¹¹⁾	-	-	30.773	-	-	-	-	-	28.308	-	-	29.016	-	-	-	-	-	29.016
2.5) Pubs / Tech Data (12)	-	-	9.960	-	-	22.649	-	-	56.950	-	-	58.374	-	-	-	-	-	58.374
2.6) Field Activities (13)	-	-	6.110	-	-	7.442	-	-	44.322	-	-	54.993	-	-	-	-	-	54.993
2.7) Other ILS (14)	-	-	3.934	-	-	8.294	-	-	9.468	-	-	11.358	-	-	-	-	-	11.358
2.8) Production Engineering Support ⁽¹⁵⁾	-	-	3.037	-	-	5.733	-	-	8.039	-	-	11.516	-	-	-	-	-	11.516
Subtotal: Support Cost	-	-	94.178	-	-	89.394	-	-	205.474	-	-	225.103	-	-	-	-	-	225.10
Gross/Weapon System Cost	192,941.000	2	385.882	145,745.667	6	874.474	144,330.625	8	1,154.645	161,492.500	6	968.955	-	-	0.000	161,492.500	6	968.95

^(†) indicates the presence of a P-5a

Footnotes:

- (1) Cost Element 1.1.1: Airframe total decreases FY2019 to FY2020 due to decrease in aircraft quantity. However, the unit cost increases in FY2020 due to loss of learning efficiencies and business base related to the FY2020 quantity reduction. Budget previously under Cost Element 1.1.3, CFE Mission Systems has been realigned within this cost element to align with planned contract structure.
- (2) Cost Element 1.1.2: Engine total decreases FY2019 to FY2020 due to PB20 quantity reduction. Unit Cost estimate is based on actual LRIP 1 and 2 Engine contract award.
- (3) Cost Element 1.1.3: CFE Mission Electronics budget previously contained in this cost element has been realigned to cost element 1.1.1 to align with planned contract structure.
- (4) Cost Element 1.1.4: GFE total decreases FY2019 to FY2020 due to PB20 quantity reduction.
- (5) Cost Element 1.1.6: Other GFE total decreases FY2019 to FY2020 due to PB20 quantity reduction.
- (6) Cost Element 1.1.7: ECO total decreases FY2019 to FY2020 due to PB20 quantity reduction. ECO funding is required to address CFE/GFE correction of deficiencies found in flight test and incorporating them into the production configuration during Low Rate Initial Production (LRIP).
- (7) Cost Element 1.2.1: FY2019 funding was reduced to account for congressional reduction. NRE increase from FY2019 to FY2020 in order to start procurement of engine rate tooling and the additional airframe rate tooling in preparation for Full Rate Production (FRP).
- (8) Cost Element 2.1: FY2019 funding was reduced to account for congressional reduction. Airframe PGSE increase from FY2019 to FY2020 supports the Depot Capability Establishment Program (CEP) to meet Title 10 USC 2464.
- (9) Cost Element 2.2: Engine PGSE increase from FY2019 to FY2020 is required to meet Title 10 US Code 2464/Navy Support Date (NSD) requirements, and establish capability for I and D level maintenance and repair for the T-408 engine.
- (10) Cost Element 2.3: Avionics PGSE is based on Depot Capability Establishment Program (CEP). FY2019 funding was reduced to account for congressional reduction. Increase from FY2019 to FY2020 is required to fund the targeted phasing of I-level and D-level repair capability standup, which includes an emphasis on I-level CASS development.

LI 0158 - CH-53K (Heavy Lift)
Navy
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	UNCLASSIFIED	
Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 01 / 1	P-1 Line Item Number / Title: 0158 / CH-53K (Heavy Lift)	Item Number / Title [DODIC]: 1 / CH-53K (Heavy Lift)
ID Code (A=Service Ready, B=Not Service Ready):	MDAP/MAIS Code	:
(11) Cost Element 2.4: FY2019 funding was reduced to account for congress Containerized Flight Training Device (CFTD), Part Task Trainer (PTT) for m	ssional reduction. Peculiar Training Equipment increase from naintainer training at MCAS New River, as well as additional C	FY2019 to FY2020 is for the procurement of the second CH-53K Courseware and Classroom Hardware required for squadron stand-up.
(12) Cost Element 2.5: FY2019 funding was reduced to account for congres data in support of development of I and D level technical publications. Requirements to meet 10 US Code 2464 / Navy Support Date (NSD).	uirements are phased with I and D level stand-up plans in airf	rame and avionics PGSE efforts to support I and D level repair capability
(13) Cost Element 2.6: FY2019 funding was reduced to account for congres are annualized efforts required to provide acquisition support, aircraft configured incorporation of airframe changes and upgrades.	ssional reduction. Field Activities increase FY2019 to FY2020 guration management, integrated logistics planning and analy	supports the progression of production. Field Activities requirements sis, and engineering support for production line improvements and
(14) Cost Element 2.7: Other ILS includes Prime Contractor support. FY201 Support Analysis (LSA), maintenance plans, supply support activities and committenance and repair.	19 funding was reduced to account for congressional reduction other ILS requirements to meet the 10 US Code 2464/Navy St	n. Funding increase from FY2019 to FY2020 funds additional Logistics upport Date (NSD) requirements to establish capability for D level
(15) Cost Element 2.8: Production Engineering Support increase from FY20 annualized basis, as it is not aircraft quantity related.	019 to FY2020 is required for Prime Contractor's non-touch pr	oduction support required for aircraft deliveries and is budgeted on an

Exhibit P-5a, Procurement History and Planning: PB 2020 N	lavy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0158 / CH-53K (Heavy Lift)	1 / CH-53K (Heavy Lift)

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Qt Delivery (Eac		Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2017	Sikorsky A/C Corp (16) / Stratford, CT	SS / FPIF	NAVAIR	Aug 2017	Aug 2020	2	107,513.500	Υ		Sep 2015
1.1.1) Airframe/CFE ^(†)		2018	Sikorsky A/C Corp (16) / Stratford, CT	SS / FPIF	NAVAIR	Apr 2019	Jul 2021	6	100,648.667	Υ		Sep 2015
1.1.1) Airframe/CFE ^(†)		2019	Sikorsky A/C Corp (16) / Stratford, CT	SS / FPIF	NAVAIR	Apr 2019	Jun 2022	8	91,495.000	Υ		Jan 2018
1.1.1) Airframe/CFE ^(†)		2020	Sikorsky A/C Corp (16) / Stratford, CT	SS / FPIF	NAVAIR	Jan 2020	Jun 2023	6	93,224.167	Υ		Jan 2019
1.1.2) Engines ^(†)		2017	General Electric Company / Lynn, MA	SS / FFP	NAVAIR	Nov 2017	Dec 2019	6	6,149.000	Υ		Jan 2016
1.1.2) Engines ^(†)		2018	General Electric Company / Lynn, MA	SS / FFP	NAVAIR	Nov 2017	Jul 2020	18	5,174.500	Υ		Jan 2017
1.1.2) Engines ^(†)		2019	General Electric Company / Lynn, MA	SS / FFP	NAVAIR	Jul 2019	Jun 2021	24	4,191.333	Υ		Jan 2018
1.1.2) Engines ^(†)		2020	General Electric Company / Lynn, MA	SS / FFP	NAVAIR	Aug 2020	Jul 2022	18	3,853.944	Y		Jan 2019

^(†) indicates the presence of a P-21

Footnotes:

(16) Contractor MSR, 1-8-5, and MAX production rates not yet identified due to transition of CH-53K production line from Florida to Connecticut. Sikorsky is reassessing production rates as part of the transition.

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1.1.1)	Airfr	rame	/CFE ⁽¹⁾																												
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xhibit I	P-21, Pro	oducti	on Sc	hedul	e: PB	202	0 Nav	/y														Date	: Mar	ch 20)19				
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		ements n Each)								Fiscal Y	ear 2019										F	iscal Ye	ar 2020						ВА
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1.1.1) Airfram	ne/CFE (1)																												
1 2017	NAVY	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	
1 2018	NAVY	6	0	6						,	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1	-	-	-	
1 2019	NAVY	8	0	8	-						Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1 2020	NAVY	6	0	6																Α -	-	-	-	-	-	-	-	-	
1.1.2) Engine	es ⁽²⁾																												
2 2017	NAVY	6	0	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	3						
2 2018	NAVY	18	0	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	1
	NAVY	24	0	24										Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
2 2020	NAVY	18	0	18																							A -	-	1
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.1.1)	Airframe	e/CFE (1)																												
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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0158 / CH-53K (Heavy Lift)	1 / CH-53K (Heavy Lift)

		Produ	ction Rates (Each	/ Year)		Procurement Leadtime (Months)							
MFR						In	itial			Reo	rder		
Ref #	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	
1	Sikorsky A/C Corp ⁽¹⁶⁾ - Stratford, CT			TBD	0	10	36	46	0	18	27	45	
2	General Electric Company - Lynn, MA			TBD	0	13	21	34	0	1	32	33	

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

(16) Contractor MSR, 1-8-5, and MAX production rates not yet identified due to transition of CH-53K production line from Florida to Connecticut. Sikorsky is reassessing production rates as part of the transition.

LI 0158 - CH-53K (Heavy Lift)
Navy

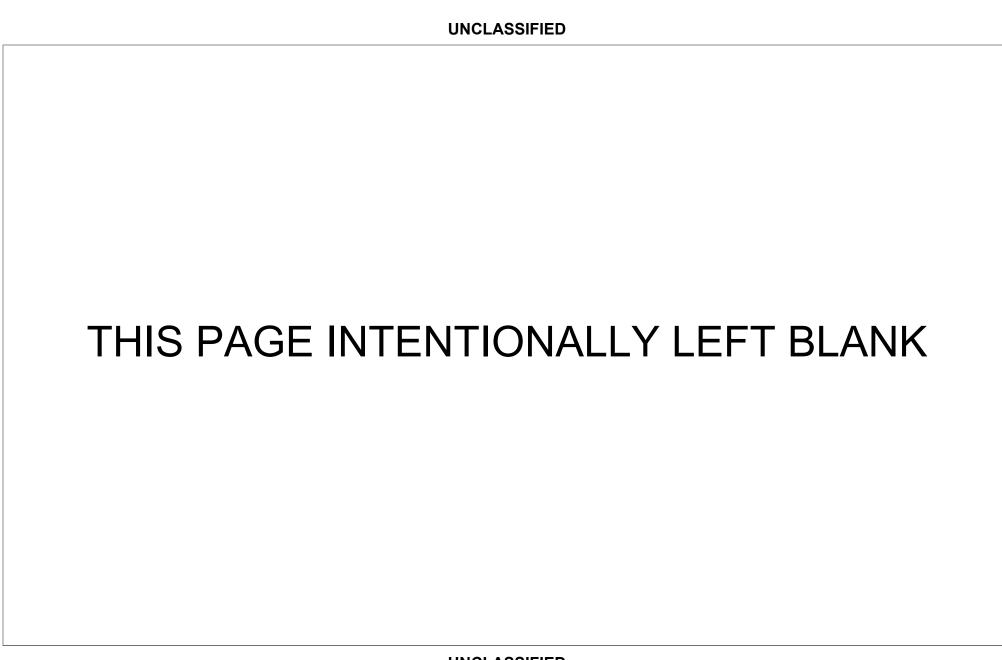


Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

P-1 Line Item Number / Title: 0158 / CH-53K (Heavy Lift)

Program Elements for Code B Items: 0605212N Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 390

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Gross/Weapon System Cost (\$ in Millions)	113.136	147.046	161.079	215.014	-	215.014	338.336	321.863	444.089	411.164	1,736.198	3,887.925
Net Procurement (P-1) (\$ in Millions)	113.136	147.046	161.079	215.014	-	215.014	338.336	321.863	444.089	411.164	1,736.198	3,887.925
Total Obligation Authority (\$ in Millions)	113.136	147.046	161.079	215.014	-	215.014	338.336	321.863	444.089	411.164	1,736.198	3,887.925

Description:

The CH-53 is the only marinized heavy-lift helicopter in the world and is the Marine Corps only heavy-lift helicopter. The CH-53 mission is the conduct of expeditionary heavy-lift assault transport of armored vehicles, equipment and personnel to support distributed operations deep inland from a sea-based center of operations. The CH-53E "Super Stallion", introduced in 1980, has developed performance degradation, fatique life, interoperability, maintenance supportability, and other operational concerns.

The CH-53K "King Stallion" is designed to address these concerns and support Marine Air-Ground Task Force heavy-lift requirements in the 21st century joint environment, and is the only heavy-lift platform that can lift the Marine Air-Ground Task Force ashore. The CH-53K provides significant improvements in range and payload, performance, cargo handling, turn-around times, reliability and maintainability, interoperability and survivability.

The CH-53K System Development and Demonstration program received a successful Milestone C decision on 4 April 2017. Initial Operational Test and Evaluation (IOT&E) is scheduled to begin 3rd quarter of FY2021, with Initial Operational Capability (IOC) to start 4th guarter of FY2021.

UNCLASSIFIED

Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

0158 / CH-53K (Heavy Lift)

P-1 Line Item Number / Title:

Program Elements for Code B Items: 0605212N Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 390

	Exhibits Schedule			Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-10	1 / CH-53K (Heavy Lift)			2 / 113.136	6 / 147.046	8 / 161.079	6 / 215.014	- / -	6 / 215.014
P-40	Total Gross/Weapon System Cost			2 / 113.136	6 / 147.046	8 / 161.079	6 / 215.014	- 1 -	6 / 215.014

^{*}Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

PB20 reflects cost estimate based on LRIP 1 Airframe and GFE contract awards.

FY2020 Advanced Procurement (AP) is required for long lead material associated with the procurement of 12 Low Rate Initial Production aircraft in FY2021.

FY2019 AP was Appropriated based on nine aircraft in FY2020. As part of FY2020 aircraft quantity reduction from nine to six aircraft, the Department of the Navy (DoN) removed additional Regular Procurement funds to compensate for the additional FY 2019 AP received.

AP is used to procure long lead materials and aircraft components with a production lead time of 12 months or more. These long lead requirements are essential to establishing and maintaining a production schedule in support of the Marine Aviation Plan and Marine Air-Ground Task Force CH-53E replacement schedule.

Procurement of long lead items is determined based upon need dates for materials/components incorporation into the production line build sequence.

LI 0158 - CH-53K (Heavy Lift) Navy UNCLASSIFIED
Page 2 of 4

P-1 Line #8 Volume 1 - 56

			CHOLACOII ILD					
Exhibit P-10, Advance Procurement	t Requirements Analys	is (page 1 - l	Budget Funding Justif	ication): PB 2020 Navy	Date: March 2019			
Appropriation / Budget Activity / Bu 1506N / 01 / 1	idget Sub Activity:		tem Number / Title: -53K (Heavy Lift)		P-5 Number / Title 1 / CH-53K (Heavy			
First System (2020) Award Date: January 2020	(2020) Award Date: First System (2020) Completion Date: Interval Between Systems: 1 Months							
CH-53K (Heavy Lift)	Production (Monti		Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)		
Quantity			2	6	8	6		
Cost Elements Wi		quired	Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)		
CFE				<u> </u>	·			
FY17 Long Lead		0	31.253	-	-	-		
FY18 Long Lead		0	55.567	-	-	-		
FY19 Long Lead		0	-	146.998	-	-		
FY20 Long Lead		0	-	-	161.029	-		
FY21 Long Lead		0	-	-	-	211.563		
Total: CFE			86.820	146.998	161.029	211.563		
GFE								
GFE - Miscellaneous ⁽³⁾		0	26.316	0.048	0.050	3.451		
Total: GFE			26.316	0.048	0.050	3.451		
Total Advance Procurement/Obligation Auth	ority		113.136	147.046	161.079	215.014		

Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0158 / CH-53K (Heavy Lift)

P-5 Number / Title:
1 / CH-53K (Heavy Lift)

10001170171	0.007.011.00	it (i loar y Liit)		17 011 001	17 Off Cort (Floary Elit)					
		FY 2020								
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)			
CFE										
FY17 Long Lead	0						-			
FY18 Long Lead	0						-			
FY19 Long Lead	0						-			
FY20 Long Lead	0						-			
FY21 Long Lead	0						211.563			
Total: CFE							211.563			
GFE										
GFE - Miscellaneous ⁽³⁾	0						3.451			
Total: GFE							3.451			
Total Advance Procurement/Obligation Authority							215.014			

Description:

The AP will be used to procure long lead materials and aircraft components with a production lead time of 12 months or more. These long lead requirements are essential to establishing and maintaining a production schedule in support of the Marine Aviation Plan and Marine Air-Ground Task Force CH-53E replacement schedule.

Procurement of long lead items is determined based upon need dates for materials/components incorporation into the production line build sequence.

CFE procurements include: various airframe components, forgings and castings, and raw materials (Titanium).

GFE procurements include: various communication, navigation and survivability components.

Footnotes:

(3) GFE - Miscellaneous includes CH-53K Communication, Navigation and Survivability components. GFE-Miscellaneous requirements increase through the FYDP as learning curve efficiencies decrease production lead times.

LI 0158 - CH-53K (Heavy Lift) Navy

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0164 / V-22 (Medium Lift)

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 212

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	339	14	13	10	-	10	9	11	8	4	2	410
Gross/Weapon System Cost (\$ in Millions)	28,746.561	1,260.538	1,157.726	995.421	0.000	995.421	963.546	1,110.269	928.746	479.423	345.413	35,987.643
Less PY Advance Procurement (\$ in Millions)	1,576.975	19.674	23.389	28.755	-	28.755	27.104	33.377	27.562	7.232	-	1,744.068
Net Procurement (P-1) (\$ in Millions)	27,169.586	1,240.864	1,134.337	966.666	0.000	966.666	936.442	1,076.892	901.184	472.191	345.413	34,243.575
Plus CY Advance Procurement (\$ in Millions)	1,596.649	23.389	28.755	27.104	-	27.104	33.377	27.562	7.232	-	-	1,744.068
Total Obligation Authority (\$ in Millions)	28,766.235	1,264.253	1,163.092	993.770	0.000	993.770	969.819	1,104.454	908.416	472.191	345.413	35,987.643
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	4.723	3.744	2.523	-	2.523	5.096	3.234	1.475	2.031	377.899	400.725
Flyaway Unit Cost (\$ in Thousands)	73,812.027	77,153.786	78,990.538	80,265.200	-	80,265.200	86,221.000	85,616.727	98,767.250	96,755.500	172,706.500	76,030.012
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The V-22 is a tilt-rotor vertical takeoff and landing aircraft currently being produced for joint service application. The program provides an aircraft to meet the amphibious/vertical assault needs of the Marine Corps, the Carrier Onboard Delivery needs of the Navy, and supplements United States Special Operations Command (USSOCOM) special mission aircraft. The aircraft is capable of flying 2,100 miles with one refueling, and gives the Services the advantage of a Vertical/Short Takeoff and Landing (V/STOL) aircraft that can rapidly self-deploy to any location in the world.

The current procurement objective is 464: 360 MV-22 Marine Corps aircraft, 48 Navy aircraft, and 56 CV-22 aircraft for USSOCOM (funded by USSOCOM and the Air Force). The program successfully completed Milestone III in the 1st Quarter of 2006, and Initial Operational Capability (IOC) in March of 2007.

Initial Spares Prior Years = \$792.397M

The USMC Program of Record (POR) for MV-22 aircraft quantities remains 360. Subsequent budget submits will be adjusted to account for the FY 2019 Congressional acceleration in the program's total quantity in order to maintain the POR of 360 aircraft.

LI 0164 - V-22 (Medium Lift) Navy UNCLASSIFIED
Page 1 of 18

P-1 Line #9 Volume 1 - 59

Exhibit P-40, l	Budget Line	Item Justific	ation: PB 2	.020 Navy
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Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0164 / V-22 (Medium Lift)

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 212

	Exhibits Schedule		Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total		
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	1 / 0164 MV-22	P-5a, P-21			339 / 28,746.561	4 / 318.503	2 / 152.000	- / 0.000	- / 0.000	- / 0.000
P-5	2 / 0164 CMV-22	P-5a, P-21			- / 0.000	10 / 942.035	11 / 1,005.726	10 / 995.421	- / 0.000	10 / 995.421
P-40 Total Gross/Weapon System Cost					339 / 28,746.561	14 / 1,260.538	13 / 1,157.726	10 / 995.421	- / 0.000	10 / 995.421

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Justification:

FY 2020 budget request for procurement of ten (10) CMV-22 aircraft and associated support. FY 2020 represents the third year of the V-22 Multiyear Procurement III contract (FY 2018-FY 2022)

LI 0164 - V-22 (Medium Lift) Navy UNCLASSIFIED Page 2 of 18

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0164 / V-22 (Medium Lift)

1 / 0164 MV-22

MDAP/MAIS Code:

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	339	4	2	-	-	-
Gross/Weapon System Cost (\$ in Millions)	28,746.561	318.503	152.000	0.000	0.000	0.000
Less PY Advance Procurement (\$ in Millions)	1,576.975	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	27,169.586	318.503	152.000	0.000	0.000	0.000
Plus CY Advance Procurement (\$ in Millions)	1,576.975	-	-	8.485	-	8.485
Total Obligation Authority (\$ in Millions)	28,746.561	318.503	152.000	8.485	0.000	8.485
(The following Resource Summary rows are fo	or informational purposes only. The cor	responding budget request	s are documented elsewher	re.)		
1 11 10 10 10 10 10 10 10 10 10 10 10 10						

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready):

	F	Prior Years	5		FY 2018			FY 2019		FY	2020 Ba	se	F۱	/ 2020 OC	0	FY	' 2020 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	·			·				<u>'</u>					'			'		'
Recurring Cost																		_
1.1.1) Airframe/CFE ^(†)	64,203.693	339	21,765.052	69,336.750	4	277.347	71,102.000	2	142.204	-	-	0.000	-	-	0.000	-	-	0.0
1.1.2) GFE Electronics	-	-	296.593	-	-	6.234	-	-	0.376	-	-	0.000	-	-	0.000	-	-	0.0
1.1.3) Engines/Eng Acc ^(†)	2,096.265	678	1,421.268	2,126.375	8	17.011	2,275.000	4	9.100	-	-	0.000	-	-	0.000	-	-	0.0
1.1.4) Other GFE	-	-	62.389	-	-	1.052	-	-	0.320	-	-	0.000	-	-	0.000	-	-	0.0
1.1.5) Recurring Flyaway ECO	-	-	162.299	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
Subtotal: Recurring Cost	-	-	23,707.601	-	-	301.644	-	-	152.000	-	-	0.000	-	-	0.000	-	-	0.0
Non Recurring Cost																		
1.2.1) Non-Recurring Cost	-	-	869.256	-		0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
1.2.2) Ancillary Equipment	-	-	151.576	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
1.2.3) Other	-	-	293.844	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
Subtotal: Non Recurring Cost	-	-	1,314.676	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
Subtotal: Flyaway Cost	-	-	25,022.277	-	-	301.644	-	-	152.000	-	-	0.000	-	-	0.000	-	-	0.0
Support Cost																		
2.1) Airframe PGSE	-	-	458.161	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
2.2) Engine PGSE	-	-	38.054	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
2.3) Avionics PGSE	-	-	238.700	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0

LI 0164 - V-22 (Medium Lift) Navy UNCLASSIFIED
Page 3 of 18

Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0164 / V-22 (Medium Lift)	1 / 0164 MV-22

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	Р	rior Year	S		FY 2018			FY 2019		FY	2020 Ba	se	F	Y 2020 OC	0	F	2020 To	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
2.4) Pec Trng Eq	-	-	443.832	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
2.5) Pub/Tech Eq	-	-	112.482	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
2.6) Prod Eng Supt	-	-	1,197.930	-	-	11.829	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
2.7) Other ILS (1)	-	-	1,003.725	-	-	5.030	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
2.8) Common SE	-	-	231.400	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Support Cost	-	-	3,724.284	-	-	16.859	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Gross/Weapon System Cost	84,798.115	339	28,746.561	79,625.750	4	318.503	76,000.000	2	152.000	-	-	0.000	-	-	0.000	-	-	0.000

^(†) indicates the presence of a P-5a

Footnotes:

⁽¹⁾ Other ILS: Included in this cost element is the Joint Program Based Logistics prime contractor support.

Exhibit P-5a, Procurement History and Planning: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0164 / V-22 (Medium Lift)

1 / 0164 MV-22

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2015	Bell Boeing / Amarillo, TX	SS / FPIF	NAVAIR	Dec 2014	Dec 2016	19	64,252.925	Y		Feb 2011
1.1.1) Airframe/CFE ^(†)		2016	Bell Boeing / Amarillo, TX	SS / FPIF	NAVAIR	Dec 2015	Dec 2017	19	65,602.227	Y		Feb 2011
1.1.1) Airframe/CFE ^(†)		2017	Bell Boeing / Amarillo, TX	SS / FPIF	NAVAIR	Nov 2016	Nov 2018	19	67,613.211	Y		Feb 2011
1.1.1) Airframe/CFE ^(†)		2018	Bell Boeing / Amarillo, TX	SS / FFP	NAVAIR	Jun 2018	Sep 2021	4	69,336.750	Y		Mar 2016
1.1.1) Airframe/CFE ^(†)		2019	Bell Boeing / Amarillo, TX	SS / FFP	NAVAIR	Dec 2018	Oct 2022	2	71,102.000	Y		Jul 2016
1.1.3) Engines/Eng Acc ^(†)		2015	Allison Engine Co. (Rolls Royce) / Indianapolis, IN	SS / FFP	NAVAIR	Jan 2015	Mar 2016	38	2,308.221	Y		Dec 2010
1.1.3) Engines/Eng Acc ^(†)		2016	Allison Engine Co. (Rolls Royce) / Indianapolis, IN	SS / FFP	NAVAIR	Jan 2016	Mar 2017	38	2,359.000	Y		Dec 2010
1.1.3) Engines/Eng Acc ^(†)		2017	Allison Engine Co. (Rolls Royce) / Indianapolis, IN	SS / FFP	NAVAIR	Aug 2017	May 2018	38	2,440.816	Y		Apr 2016
1.1.3) Engines/Eng Acc ^(†)		2018	Allison Engine Co. (Rolls Royce) / Indianapolis, IN	SS / FFP	NAVAIR	May 2018	Jul 2019	8	2,126.375	Y		Dec 2015
1.1.3) Engines/Eng Acc ^(†)		2019	Allison Engine Co. (Rolls Royce) / Indianapolis, IN	SS / FFP	NAVAIR	Jan 2021	Mar 2022	4	2,275.000	Y		Dec 2016

^(†) indicates the presence of a P-21

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	ars Deliveri																												
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1 20	2017 NA\	VY	19 ⁽²⁾	0	19														_	1									
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2 20	2018 NA\	VY	8	0	8																								
2 20	2019 NA\	VY	4	0	4																								
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	Cost El (Units i								ı	Fiscal Ye	ar 2017										ı	Fiscal Yo	ear 2018					
M F R # FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016		O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	Year 20° J U L	17 A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P
I.1) Airframe																												
	eliveries: 282																											
1 2015	NAVY	19	0	19	-	-	1	1	1	2	2	2	1	2	2	2	1	2										
1 2016	NAVY	19	0	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	2	1	2	2	2	2	1
1 2017	NAVY	19 ⁽²⁾	0	19		Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 2018	NAVY	4	0	4											1									J.	Α -	-	-	-
1 2019	NAVY	2 (3)	0	2	-																			-				
I.3) Engines																												
	eliveries: 564																											
2 2015		38	20	18	4	4	4	2	4							-												
2 2016		38	0		-	-	-	-	-	2	4	4	4	2	4	4	4	4	2	2	2							
2 2017	NAVY	38	0	38											Α -	-	-	-	-	-	-	-	-	3	4	4	4	4
2 2018	NAVY	8	0	8	-										1									Α -	-	-	-	-
2 2019	NAVY	4	0	4																								
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		Cost El (Units i	ements n Each)								Fiscal Ye	ear 2019											Fiscal Ye			****			
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1.1.1)	Airfran	ne/CFE																											
Prior	Years D	Deliveries: 282																											
1	2015	NAVY	19	19																									
1	2016	NAVY	19	17	2	2								1											1		, ,		
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1	2018	NAVY	4	0	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	2019	NAVY	2 (3)	0	2			A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.3)	Engine	es/Eng Acc																											
Prior	Years D	Deliveries: 564																											
2	2015	NAVY	38	38																									
_	_	NAVY	38	38	0			, ,			1																		
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_	2018		8	0		-	-	-	-	-	-	-	-	-	4	2	2	_											
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			Cost I	Elements in Each)								Fiscal Y	ear 2021											Fiscal Ye	ar 2022						B A
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			liveries: 282	2																											
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_	_	-	NAVY	19 ⁽²⁾	18		1																								
_	_		NAVY	4	0		_		-	-	_	_	_	_	_	_	l -	2	1	1										-	
-	_		NAVY	2 (3)	0			_	_	-	_	_	_	-	_	_	-	_		-	_	_	-	-		_	-	-	-	-	
			/Eng Acc	2																											
			liveries: 564	1																											
			NAVY	38	38	0																									
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		lements in Each)								Fiscal	Year 2023	3										Fiscal Y	ear 2024	ı					
			ACCEPT				_						Calenda	r Year 20	23		1						Cale	ndar Yea	r 2024				
M F R D # FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
I.1.1) Airfram	e/CFE											_																	
Prior Years D	eliveries: 282																												
1 2015	NAVY	19	19	0																									L
1 2016	NAVY	19	19	0																									
1 2017	NAVY	19 ⁽²⁾	19	0																									
1 2018	NAVY	4	4	0			_																						
1 2019	NAVY	2 (3)	0	2	1	1																							
1.1.3) Engines	s/Eng Acc						•																						
Prior Years D	eliveries: 564																												
2 2015		38	38	0																									L
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LI 0164 - V-22 (Medium Lift) Navy UNCLASSIFIED
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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0164 / V-22 (Medium Lift)	1 / 0164 MV-22

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						In	itial			Red	order	
Ref #	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Bell Boeing - Amarillo, TX	6	10	44	19	3	24	27	0	2	24	26
	Allison Engine Co. (Rolls Royce) - Indianapolis, IN			88	9	3	14	17	3	3	14	17

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

 $^{^{(2)}}$ Delivery of FY17 Congressional Add has been updated to show delivery with Lot 23 aircraft.

⁽³⁾ FY19 Aircraft procured with Lot 23 contract will be delivered with Lot 25.

Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0164 / V-22 (Medium Lift)

Date: March 2019

Item Number / Title [DODIC]:
2 / 0164 CMV-22

MDAP/MAIS Code:

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	-	10	11	10	-	10
Gross/Weapon System Cost (\$ in Millions)	0.000	942.035	1,005.726	995.421	0.000	995.421
Less PY Advance Procurement (\$ in Millions)	-	19.674	23.389	28.755	-	28.755
Net Procurement (P-1) (\$ in Millions)	0.000	922.361	982.337	966.666	0.000	966.666
Plus CY Advance Procurement (\$ in Millions)	19.674	23.389	28.755	18.619	-	18.619
Total Obligation Authority (\$ in Millions)	19.674	945.750	1,011.092	985.285	0.000	985.285
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	94,203.500	91,429.636	99,542.100	-	99,542.100

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready):

	P	rior Years	3		FY 2018			FY 2019		F١	' 2020 Bas	e	F۱	/ 2020 OC	0	F۱	/ 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost					'		'	'		'						·		'
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	-	-	0.000	70,804.000	10	708.040	71,961.273	11	791.574	72,750.200	10	727.502	-	-	0.000	72,750.200	10	727.50
1.1.2) GFE Electronics	-	-	0.000	-	-	15.586	-	-	20.568	-	-	16.207	-	-	0.000	-	-	16.20
1.1.3) Engines/Eng Acc ^(†)	-	-	0.000	2,126.300	20	42.526	2,275.091	22	50.052	2,228.000	20	44.560	-	-	0.000	2,228.000	20	44.56
1.1.4) Other GFE	-	-	0.000	-	-	1.430	-	-	1.601	-	-	2.734	-	-	0.000	-	-	2.73
1.1.5) Recurring Flyaway ECO	-	-	0.000	-	-	3.349	-	-	3.409	-	-	3.675	-	-	0.000	-	-	3.6
Subtotal: Recurring Cost	-	-	0.000	-	-	770.931	-	-	867.204	-	-	794.678	-	-	0.000	-	-	794.6
Non Recurring Cost																		
1.2.1) Non-Recurring Cost	-	-	0.000	-	-	7.578	-	-	4.938	-	-	5.027	-	-	0.000	-	-	5.02
1.2.2) Ancillary Equipment	-	-	0.000	-	-	0.000	-	-	2.735	-	-	2.947	-	-	0.000	-	-	2.94
Subtotal: Non Recurring Cost	-	-	0.000	-	-	7.578	-	-	7.673	-	-	7.974	-	=	0.000	-	-	7.9
Subtotal: Flyaway Cost	-	-	0.000	-	-	778.509	-	-	874.877	-	-	802.652	-	-	0.000	-	-	802.6
Support Cost								,		,			,			,		
2.1) Airframe PGSE (5)	-	-	0.000	-	-	41.754	-	-	4.010	-	-	39.180	-	-	0.000	-	-	39.18
2.2) Engine PGSE (6)	-	-	0.000	-	-	3.308	-	-	2.633	-	-	0.435	-	-	0.000	-	-	0.43
2.3) Avionics PGSE	-	-	0.000	-	-	2.881	-	-	0.949	-	-	0.725	-	-	0.000	-	-	0.72

LI 0164 - V-22 (Medium Lift) Navy UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
		Item Number / Title [DODIC]:
1506N / 01 / 1	0164 / V-22 (Medium Lift)	2 / 0164 CMV-22

ID Code (A=Service Ready, B=Not Service Ready):

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding

MDAP/MAIS Code:

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	F	Prior Years	S		FY 2018			FY 2019		F'	Y 2020 Ba	se	F'	Y 2020 OC	0	F`	Y 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
2.4) Pec Trng Eq (7)	-	-	0.000	-	-	0.550	-	-	23.700	-	-	19.619	-	-	0.000	-	-	19.619
2.5) Pub/Tech Eq	-	-	0.000	-	-	0.289	-	-	0.300	-	-	0.300	-	-	0.000	-	-	0.300
2.6) Prod Eng Supt (8)	-	-	0.000	-	-	82.832	-	-	44.569	-	-	75.315	-	-	0.000	-	-	75.315
2.7) Other ILS (9)	-	-	0.000	-	-	31.912	-	-	54.688	-	-	57.195	-	-	0.000	-	-	57.195
Subtotal: Support Cost	-	-	0.000	-	-	163.526	-	-	130.849	-	-	192.769	-	-	0.000	-	-	192.769
Gross/Weapon System Cost	-	-	0.000	94,203.500	10	942.035	91,429.636	11	1,005.726	99,542.100	10	995.421	-	-	0.000	99,542.100	10	995.421

Remarks:

FY 2018 includes Congressional Add of 4 CMV-22 aircraft. FY 2019 includes Congressional Add of 4 CMV-22 aircraft.

(†) indicates the presence of a P-5a

Footnotes:

- (4) The CMV-22 aircraft is a modification of the MV-22 and will perform the Carrier Onboard Delivery (COD) mission and include: (1) external conformal fuel tanks to provide the capability to meet the range requirements that the COD mission demands, (2) a high frequency radio to transmit/receive beyond line of sight over water, and (3) a public address system for use while transporting passengers. FY 2019 procures 11 CMV-22 aircraft and FY 2020 will procure 10 CMV-22 aircraft to support approved Multiyear Procurement III contract.
- (5) Airframe PGSE: FY 2019 PGSE line was reduced and the profile adjusted to allow the program to fully fund the FY 2019 aircraft quantity. FY 2020 increase due to initial standup of support for CMV-22 capability.
- $^{(6)}$ Engine PGSE: Funding supports the initial standup for CMV-22 capability.
- (7) Peculiar Training Equipment: A total of 4 Flight Training Devices (2 FTD/ 2 CFTD), 1 Interactive Cockpit Learning Environment (ICLE) device, 1 Cockpit Management System Part Task Trainer (CMS-PTT) device and Virtual Maintenance Training (VMT) devices are required. FY 2019 procurement includes 1 FTD and VMT with a required need date of March 2020. FY 2020 procurement includes 1 Flight Simulator and 1 Cockpit Learning Environment Device.
- (8) FY 2020 increase in Prod Eng Support funds the Follow-On Flight Test and Mission Care efforts, both prime contractor support, are included in this cost element. FY 2019 funding was reduced in order for the program to be able to procure all the enacted aircrafts.
- (9) Other ILS: Included in this cost element is the Joint Program Based Logistics prime contractor support. FY 2020 increase represents additional logistics support required for CMV-22 configuration.

LI 0164 - V-22 (Medium Lift) Navy

Exhibit P-5a, Procurement History and Planning: PB 2020	Navy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0164 / V-22 (Medium Lift)	2 / 0164 CMV-22

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2018	Bell Boeing / Amarillo, TX	SS / FPIF	NAVAIR	Jun 2018	Feb 2020	10	70,804.000	N	Sep 2016	Mar 2016
1.1.1) Airframe/CFE ^(†)		2019	Bell Boeing / Amarillo, TX	SS / FPIF	NAVAIR	Dec 2018	Dec 2020	11	71,961.273	N	Sep 2016	Mar 2016
1.1.1) Airframe/CFE ^(†)		2020	Bell Boeing / Amarillo, TX	SS / FPIF	NAVAIR	Dec 2019	Feb 2022	10	72,750.200	N	Sep 2016	Mar 2016
1.1.3) Engines/Eng Acc ^(†)		2018	Allison Engine Co. (Rolls Royce) / Indianapolis, IN	SS / FFP	NAVAIR	May 2018	Jul 2019	20	2,126.300	Υ		Apr 2016
1.1.3) Engines/Eng Acc ^(†)		2019	Allison Engine Co. (Rolls Royce) / Indianapolis, IN	SS / FFP	NAVAIR	Jan 2019	Mar 2020	22	2,275.091	Υ		Apr 2016
1.1.3) Engines/Eng Acc ^(†)		2020	Allison Engine Co. (Rolls Royce) / Indianapolis, IN	SS / FFP	NAVAIR	Jan 2020	Mar 2021	20	2,228.000	Υ		Apr 2016

^(†) indicates the presence of a P-21

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		iation / 01 / 1	Budge	t Activ	vity /	Budg	jet Si	ub Ac	tivity	:			ltem -22 (N												nber / CMV-2		[DOI	DIC]:		
			lements in Each)								Fiscal \	ear 2018	3										Fiscal Ye	ear 2019						В
				ACCEPT				_					(alendar	Year 20	8				_				Calen	dar Yea	2019				Ĺ
M F R 9 #	FY	SERVICE	PROC QTY		BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	J U	A U G	S E P	A N C E
.1.1)	Airfram	e/CFE ⁽⁴⁾		·			,													•									·	
1		NAVY	10	0	10									Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	2018	AF ^(‡)	1	0	1									Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	2018	Total	11	0	11									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	2019	NAVY	11 ⁽¹⁰⁾	0	11															Α -	-	-	-	-	-	-	-	-	-	
1	2020	NAVY	10	0	10																									
.1.3)	Engine	s/Eng Acc																												
2	2018	NAVY	20	0	20								Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	•
2	2019	NAVY	22 (11)	0	22																A -	-	-	-	-	-	-	-	-	2
2	2020	NAVY	20	0	20																									2
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	U L	A U G	S E P	

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		riation . ' 01 / 1	Budge	et Acti	vity /	Budç	get Su	ıb Ac	tivity:	:			Item -22 (N												nber / CMV-2		[DOD	IC]:		
			Elements s in Each)								Fiscal Y	ear 2020											Fiscal Ye	ar 2021						В
				ACCEPT									С	alendar	Year 202	0								Caler	dar Year	2021				Ĺ
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1.1.1) Airfra	me/CFE (4)																												
1	201	B NAVY	10	0	10	-	-	-	-	1	1	-	-	1	1	1	1	-	-	-	-	-	-	-	-	-	-	2	-	
1	201	8 AF ^(‡)	1	0	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	201	8 Total	11	0	11	-	-	-	-	1	1	-	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	2	-	
1	201	9 NAVY	11 (10)	0	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	2	2	-	-	
1	202	0 NAVY	10	0	10			Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
1.1.3) Engir	es/Eng Acc			· · · · · ·			,			<u>'</u>	'	,				· · · · · ·				<u> </u>									
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019	NAVY	11 ⁽¹⁰⁾	7	4	-	-	-	-	-	-	-	-	-	-	1	1	-	2											0
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LI 0164 - V-22 (Medium Lift) Navy UNCLASSIFIED
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P-1 Line #9 **Volume 1 - 75**

Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0164 / V-22 (Medium Lift)	2 / 0164 CMV-22

		Produc	ction Rates (Each	/ Year)			•	Procurement Le	adtime (Months)			
MFR						In	itial			Red	order	
Ref #	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Bell Boeing - Amarillo, TX	6	10	44	19	3	17	20	C	2	24	26
	Allison Engine Co. (Rolls Royce) - Indianapolis, IN			88	9	3	14	17	3	3	14	17

^(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule. "A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽¹⁰⁾ FY19 Aircraft (qty 2) contracted with Lot 23 will deliver with Lot 25

⁽¹¹⁾ FY19 Engine Procurement will have deliveries in Lot 24 and Lot 25. The engine contracts will be awarded in separate actions to meet delivery schedule.

Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

0164 / V-22 (Medium Lift)

P-1 Line Item Number / Title:

Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 212

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Gross/Weapon System Cost (\$ in Millions)	1,596.649	23.389	28.755	27.104	-	27.104	33.377	27.562	7.232	-	-	1,744.068
Net Procurement (P-1) (\$ in Millions)	1,596.649	23.389	28.755	27.104	-	27.104	33.377	27.562	7.232	-	-	1,744.068
Total Obligation Authority (\$ in Millions)	1,596.649	23.389	28.755	27.104	-	27.104	33.377	27.562	7.232	-	-	1,744.068

Description:

The V-22 is a tilt-rotor vertical takeoff and landing aircraft currently being produced for joint service application. The program provides an aircraft to meet the amphibious/vertical assault needs of the Marine Corps, the Carrier Onboard Delivery needs of the Navy, and supplements USSOCOM special mission aircraft. The aircraft is capable of flying 2,100 miles with one refueling, and gives the Services the advantage of a Vertical/Short Takeoff and Landing (V/STOL) aircraft that can rapidly self-deploy to any location in the world.

The current procurement objective is 464: 360 MV-22 Marine Corps aircraft, 48 Navy aircraft, and 56 CV-22 aircraft for USSOCOM (funded by USSOCOM and the Air Force). The program successfully completed Milestone III in the 1st Quarter of 2006, and Initial Operational Capability (IOC) in March of 2007.

The Advance Procurement (AP) funding will be used to procure long lead CFE items (24 months or greater production lead time) such as raw materials (inclusive of steel, titanium, aluminum, composites), forgings, bearings, fittings, panel assemblies, actuators, liners, bracket assemblies, retainer assemblies, bushings, rib assemblies, frame assemblies, pump assemblies, buffers, empennage assemblies, unions, flight control computers, lightweight inertial navigation system, skin assemblies, advanced mission computers, tube assemblies, gearboxes, and airframe structural components. V-22 lead times for components have been as high as 40.6 months (empennage assemblies). Other specific material lead items are 130 degree heavy duty hex drive bolts (39.0 months), remote transmitters (36.6 months), drag strut actuator assemblies (35.8 months), and steering unit supplier pull (35 months). All of these long lead items are essential to maintaining the current schedule.

Any reduction or delay in approval of advance procurement funding for CFE Airframe would result in a significant cost increase and schedule delay to the V-22 program.

The USMC Program of Record (POR) for MV-22 aircraft quantities remains at 360. Subsequent budget submits will be adjusted to account for the FY19 Congressional acceleration aircraft in the program's total quantity in order to maintain the POR of 360 aircraft.

LI 0164 - V-22 (Medium Lift) Navy UNCLASSIFIED
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P-1 Line #10 Volume 1 - 77

Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

0164 / V-22 (Medium Lift)

P-1 Line Item Number / Title:

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 212

	Exhibits Schedule			Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-10	1 / 0164 MV-22			339 / 1,576.975	4 / -	2/ -	- / 8.485	- / -	- / 8.485
P-10	2 / 0164 CMV-22			- / 19.674	10 / 23.389	11 / 28.755	10 / 18.619	- / -	10 / 18.619
P-40	Total Gross/Weapon System Cost			339 / 1,596.649	14 / 23.389	13 / 28.755	10 / 27.104	- 1 -	10 / 27.104

^{*}Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2020 Advance Procurement funding is requirements are calculated on a termination liability basis, reflecting contractor's funding requirements for procurement of long lead parts and materials necessary to protect the delivery schedule.

Cost estimates use Multiyear Procurement contract structure for FY 2018 - 2022 for MV-22 and CMV-22.

LI 0164 - V-22 (Medium Lift) Navy

		•	UNCLASSIFIED			
Exhibit P-10, Advance Procureme	nt Requirements Analys	s (page 1 - E	Budget Funding Justific	cation): PB 2020 Navy	Date: March 2019	
Appropriation / Budget Activity / E 1506N / 01 / 1	Budget Sub Activity:		em Number / Title: ? (Medium Lift)		P-5 Number / Title: 1 / 0164 MV-22	
First System (2020) Award Date: November 2019	First System (2020) Compl October 2020	etion Date:		Interval Between Syst 24 Months	ems:	
0164 MV-22	Production I		Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)
Quantity			339	4	2	-
Cost Elements	When Rec		Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)
CFE				·		
Prior Years EOQ/Long Lead		0	1,128.023	-	-	-
FY13 for Lot 18 Long Lead		0	59.073	-	-	-
FY14 for Lot 19 Long Lead		0	62.484	-	-	-
FY14 EOQ		0	18.050	-	-	-
FY15 for Lot 20 Long Lead		0	40.017	-	-	-
FY15 EOQ		0	15.690	-	-	-
FY16 for Lot 21 Long Lead		0	40.411	-	-	-
FY16 EOQ		0	15.690	-	-	-
FY17 for Lot 22 Long Lead		0	38.590	-	-	-
FY17 EOQ		0	14.870	-	-	-
FY20 for Lot 25 Long Lead		0	-	-	-	7.060
Total: CFE			1,432.898	-	-	7.060
GFE						
GFE Other		0	86.028	-	-	-
GFE Com/Nav		0	25.767	-	-	0.713
GFE EW		0	32.282	-	-	0.712
Total: GFE			144.077	-	-	1.425
Total Advance Procurement/Obligation Au	thority		1,576.975	-	-	8.485

LI 0164 - V-22 (Medium Lift) Navy

P-1 Line #10 **Volume 1 - 79**

Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:

0164 / V-22 (Medium Lift)

P-5 Number / Title:

1 / 0164 MV-22

		(
				FY 2	020		
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)
CFE							
Prior Years EOQ/Long Lead	C						-
FY13 for Lot 18 Long Lead	C)					-
FY14 for Lot 19 Long Lead	C)					-
FY14 EOQ	C)					-
FY15 for Lot 20 Long Lead	C						-
FY15 EOQ	C						-
FY16 for Lot 21 Long Lead	C						-
FY16 EOQ	C						-
FY17 for Lot 22 Long Lead	C						-
FY17 EOQ	C						-
FY20 for Lot 25 Long Lead	C						7.060
Total: CFE							7.060
GFE							
GFE Other	C						-
GFE Com/Nav	C						0.713
GFE EW	C						0.712
Total: GFE				·			1.425
Total Advance Procurement/Obligation Authority							8.485

Description:

Advance Procurement will be used to procure long lead items.

			0.11012/10011 1112			
Exhibit P-10, Advance Procurement	Requirements Analys	is (page 1 -	Budget Funding Justifi	cation): PB 2020 Navy	Date: March 2019	
Appropriation / Budget Activity / Bu 1506N / 01 / 1	dget Sub Activity:		tem Number / Title: 2 (Medium Lift)		P-5 Number / Title: 2 / 0164 CMV-22	
First System (2020) Award Date: November 2019	First System (2020) Comp October 2020	letion Date:		Interval Between Syst 24 Months	tems:	
0164 CMV-22	Production (Monti		Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)
Quantity			-	10	11	10
Cost Elements		quired	Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)
CFE	,					
FY17 for Lot 22 Long Lead		0	18.174	-	-	-
FY18 for Lot 23 Long Lead		0	-	19.674	-	-
FY19 for Lot 24 Long Lead		0	-	-	23.447	-
FY20 for Lot 25 Long Lead		0	-	-	-	15.131
Total: CFE			18.174	19.674	23.447	15.131
GFE						
GFE Com/Nav		0	0.750	1.899	2.655	1.744
GFE EW	EW			1.816	2.653	1.744
Total: GFE			1.500	3.715	5.308	3.488
Total Advance Procurement/Obligation Author	ority		19.674	23.389	28.755	18.619

Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:

0164 / V-22 (Medium Lift)

P-5 Number / Title:
2 / 0164 CMV-22

				FY 2	020		
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)
CFE							
FY17 for Lot 22 Long Lead	0						-
FY18 for Lot 23 Long Lead	0						-
FY19 for Lot 24 Long Lead	0						-
FY20 for Lot 25 Long Lead	0						15.131
Total: CFE							15.131
GFE							
GFE Com/Nav	0						1.744
GFE EW	0	-					1.744
Total: GFE							3.488
Total Advance Procurement/Obligation Authority							18.619

Description:

Advance Procurement will be used to procure long lead items

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0178 / UH-1Y/AH-1Z

Aircraft

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604245N

Line Item MDAP/MAIS Code: 101

<u> </u>												
	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	OCO	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	295	29	25	-	-	-	-	-	-	-	-	349
Gross/Weapon System Cost (\$ in Millions)	8,794.971	938.961	840.437	62.003	0.000	62.003	7.353	7.538	7.656	7.795	-	10,666.714
Less PY Advance Procurement (\$ in Millions)	409.202	49.194	42.082	-	-	-	-	=	-	-	-	500.478
Net Procurement (P-1) (\$ in Millions)	8,385.769	889.767	798.355	62.003	0.000	62.003	7.353	7.538	7.656	7.795	-	10,166.236
Plus CY Advance Procurement (\$ in Millions)	458.396	42.082	-	-	-	-	-	-	-	-	-	500.478
Total Obligation Authority (\$ in Millions)	8,844.165	931.849	798.355	62.003	0.000	62.003	7.353	7.538	7.656	7.795	-	10,666.714
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget requests	are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	25,487.675	30,057.414	30,507.080	-	-	-	-	-	-	-	-	26,381.862
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The mission of the AH-1Z attack helicopter is to provide rotary wing close air support, anti-armor, armed escort, armed/visual reconnaissance, anti-helicopter and point air defense and fire support coordination during day/night conditions. UH-1Y utility helicopter also provides command and control and combat assault support during day/night and reduced weather conditions. The UH-1Y/AH-1Z procurement strategy is to convert 37 AH-1W helicopters into AH-1Zs (complete), build 152 new AH-1Zs, remanufacture ten (10) H-1N helicopters into UH-1Ys (complete), and build 150 new UH-1Y models. The UH-1Y and AH-1Z share an 85 percent common footprint, which includes portions of maintenance planning, technical data, supply support, support equipment, facilities, and resources required at the intermediate and depot level maintenance activities for both structural and avionics items of repair.

Major modifications include a new 4-bladed rotor system with semiautomatic blade fold of the new composite rotor blades, performance-matched transmissions, a new 4-bladed tail rotor and drive system, upgraded landing gear, and pylon structural modifications. Both aircraft also incorporate common, modernized, and fully integrated cockpits/avionics that will reduce operator work load and improve situational awareness and safety. The UH-1Y/AH-1Z aircraft have increased maneuverability, speed, and payload capability. Additionally, the AH-1Z upgrades the current AH-1W Night Targeting System (NTS) Forward Looking Infrared (FLIR) system to a 3rd generation, staring, focal plane array FLIR that significantly extends autonomous weapons engagement ranges.

Congress added seven (7) AH-1Z aircraft in 2018 and the program was able to meet its program of record of 349 aircraft.

UH-1Y completed deliveries in April 2018.

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LI 0178 - UH-1Y/AH-1Z Navy

P-1 Line #11

Volume 1 - 83

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0178 / UH-1Y/AH-1Z

Aircraft

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604245N

Line Item MDAP/MAIS Code: 101

ID Code (A=Service Ready, B=Not Service Ready): A

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)				
P-5	1 / UH-1Y				160 / 4,260.200	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-5	2 / AH-1Z	P-5a, P-21			135 / 4,534.771	29 / 938.961	25 / 840.437	- / 62.003	- / 0.000	- / 62.003
P-40	Total Gross/Weapon System Cost				295 / 8,794.971	29 / 938.961	25 / 840.437	- / 62.003	- / 0.000	- / 62.003

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2020 budget request provides for continued AH-1Z aircraft production support and line shut down costs as FY2019 is the last year of procurement for AH-1Z aircraft.

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Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:
1506N / 01 / 1

P-1 Line Item Number / Title:
0178 / UH-1Y/AH-1Z

Item Number / Title [DODIC]:
1 / UH-1Y

MDAP/MAIS Code:

12 CCC (* Service risady, 2 risk service risady) :						
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	160	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	4,260.200	0.000	0.000	0.000	0.000	0.000
Less PY Advance Procurement (\$ in Millions)	212.514	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	4,047.686	0.000	0.000	0.000	0.000	0.000
Plus CY Advance Procurement (\$ in Millions)	212.515	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	4,260.201	0.000	0.000	0.000	0.000	0.000
(The following Resource Summary rows are for informat	ional purposes only. The corr	responding budget requests	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	26,626.250	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready) :

	P	rior Years	3		FY 2018			FY 2019		F۱	2020 Ba	se	F	/ 2020 OC	0	F۱	/ 2020 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) Airframe/CFE	18,086.725	160	2,893.876	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.2) GFE Electronics	-	-	314.204	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.3) Engines/Eng Acc (new)	553.597	248	137.292	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.4) Engines/Eng Acc (refurb)	386.472	72	27.826	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.5) Armament	-	-	1.526	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.6) Other GFE	-	-	46.235	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.7) ECO	-	-	65.878	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	3,486.837	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Non Recurring Cost																		
1.2.1) Non-Recur Cost	-	-	125.857	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.2.2) Ancillary Equip	-	-	14.815	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Non Recurring Cost	-	-	140.672	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Flyaway Cost	-	-	3,627.509	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Support Cost																,		•
2.1) Airframe PGSE	-	-	169.314	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
2.2) Pec trng Eq	-	-	117.373	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
2.3) Pub/Tech Eq	-	-	86.087	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
2.4) Prod Eng Supt	-	-	136.620	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000

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Exhibit P-5, Cost Analysis: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]:

1506N / 01 / 1 0178 / UH-1Y/AH-1Z 1 / UH-1Y ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

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	P	rior Years	5		FY 2018			FY 2019		F	Y 2020 Ba	se	F	Y 2020 OC	0	F	Y 2020 To 1	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
2.5) Other ILS	-	-	120.304	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
2.6) Reclamation	-	-	2.993	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Support Cost	-	-	632.691	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Gross/Weapon System Cost	26,626.250	160	4,260.200	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000

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Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0178 / UH-1Y/AH-1Z

Date: March 2019

Item Number / Title [DODIC]:
2 / AH-1Z

MDAP/MAIS Code:

33,617.480

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	135	29	25	-	-	-
Gross/Weapon System Cost (\$ in Millions)	4,534.771	938.961	840.437	62.003	0.000	62.003
Less PY Advance Procurement (\$ in Millions)	196.687	49.208	42.082	-	-	-
Net Procurement (P-1) (\$ in Millions)	4,338.084	889.753	798.355	62.003	0.000	62.003
Plus CY Advance Procurement (\$ in Millions)	245.881	42.082	-	-	-	-
Total Obligation Authority (\$ in Millions)	4,583.965	931.835	798.355	62.003	0.000	62.003
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-

32,377.966

33,590.896

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready):

Gross/Weapon System Unit Cost (\$ in Thousands)

LI 0178 - UH-1Y/AH-1Z

	P	rior Years	3		FY 2018			FY 2019		FY	' 2020 Ba	se	F۱	/ 2020 OC	:0	FY	' 2020 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost					'		'	'		'		'	'		'	'		
Recurring Cost																		-
1.1.1) Airframe/CFE ^(†)	20,146.600	135	2,719.791	21,327.973	29	618.511	21,774.487	25	544.362	-	-	0.000	-	-	0.000	-	-	0.
1.1.2) GFE Electronics	-	-	535.898	-	-	177.355	-	-	154.201	-	-	0.000	-	-	0.000	-	-	0.
1.1.3) Engines/Eng Acc (new) ^{(†) (2)}	769.355	166	127.713	849.961	58	49.298	866.960	50	43.348	-	-	0.000	-	-	0.000	-	-	0.
1.1.4) Engines/Eng Acc (refurb)	313.846	104	32.640	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0
1.1.5) Armament	-	-	53.216	-	-	16.205	-	-	14.239	-	-	0.000	-	-	0.000	-	-	0
1.1.6) Other GFE	-	-	40.187	-	-	4.926	-	-	4.510	-	-	0.000	-	-	0.000	-	-	0
1.1.7) Rec Flyaway ECO	-	-	64.640	-	-	5.370	-	-	2.017	-	-	0.000	-	-	0.000	-	-	0
Subtotal: Recurring Cost	-	-	3,574.085	-	-	871.665	-	-	762.677	-	-	0.000	-	-	0.000	-	-	0
Non Recurring Cost																		
1.2.1) Non-Recur Cost	-	-	130.281	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	C
1.2.2) Production Line Shutdown ⁽³⁾	-	-	0.000	-	-	0.000	-	-	0.000	-	-	54.064	-	-	0.000	-	-	54
1.2.3) Ancillary Equip	-	-	186.989	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	C
Subtotal: Non Recurring Cost	-	-	317.270	-	-	0.000	-	-	0.000	-	-	54.064	-	=	0.000	-	-	54
Subtotal: Flyaway Cost	-	-	3,891.355	-	-	871.665	-	-	762.677	-	-	54.064	-	-	0.000	-	-	54

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Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0178 / UH-1Y/AH-1Z	2 / AH-1Z

ID Code (A=Service Ready, B=Not Service Ready) :

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding

MDAP/MAIS Code:

	F	rior Years	\$		FY 2018			FY 2019		FY	7 2020 Bas	se	F	Y 2020 OC	0	F`	/ 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
2.1) Airframe PGSE (4)	-	-	147.785	-	-	13.836	-	-	10.431	-	-	0.000	-	-	0.000	-	-	0.000
2.2) Pec Trng Eq	-	-	120.448	-	-	0.933	-	-	18.000	-	-	0.000	-	-	0.000	-	-	0.000
2.3) Pub/Tech Eq	-	-	85.112	-	-	6.628	-	-	6.056	-	-	0.000	-	-	0.000	-	-	0.000
2.4) Prod Eng Supt (5)	-	-	169.317	-	-	24.325	-	-	24.515	-	-	7.939	-	-	0.000	-	-	7.939
2.5) Other ILS (6)	-	-	117.761	-	-	21.574	-	-	18.758	-	-	0.000	-	-	0.000	-	-	0.000
2.6) Reclamation	-	-	2.993	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Support Cost	-	-	643.416	-	-	67.296	-	-	77.760	-	-	7.939	-	-	0.000	-	-	7.939
Gross/Weapon System Cost	33,590.896	135	4,534.771	32,377.966	29	938.961	33,617.480	25	840.437	-	-	62.003	-	-	0.000	-	-	62.003

^(†) indicates the presence of a P-5a

Footnotes:

- (1) FY 2019 includes three years of Prime Contractor Systems Engineering Program Management (SEPM) costs budgeted in the final year of production airframe contract to cover projects as the last lot of airframes deliver through 2022.
- (2) All new engines were factored into the budget beginning in FY 2016. New T-700-401C engines provide for higher maintainability and reliability, increased time on wing, and ultimately lower life-cycle costs.
- (3) FY 2020 request of \$54.1M for production line shutdown will support storage and disposition of UH-1Y tooling and preparation for drawdown of AH-1Z production line through 2022. Specific activities include: line tear down, inspection and classification of equipment inventory, technical data dispositioning, tooling preservation and storage, and associated shipping costs.
- (4) Airframe PGSE includes requirements to complete deferred depot stand-up in compliance with Title 10 organic depot capability requirement.
- (5) The FY20 funding supports program office management and oversight of the incorporation of Engineering Change Proposal and other technical changes into the production line. This includes the engineering, logistics, and GFE efforts associated with ensuring the technical changes planned for aircraft have been fully reviewed and validated prior to incorporation into the production line.
- (6) Other ILS includes requirements to complete deferred depot stand-up in compliance with Title 10 organic depot capability requirement.

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Exhibit P-5a, Procurement History and Planning: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0178 / UH-1Y/AH-1Z

P-1 Line Item Number / Title:
2 / AH-1Z

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	0			Method/Type		Award	Date of First			Specs	Date Revision	RFP Issue
Cost Elements	o	FY	Contractor and Location	or Funding Vehicle	Location of PCO	Award Date	Delivery	Qty (Each)	Unit Cost	Avail Now?	Available	Date
1.1.1) Airframe/CFE ^(†)		2014	Bell Helicopter / Fort Worth TX	C / FPIF	NAVAIR	May 2014	Apr 2017	10	20,027.979	Υ		Jan 2013
1.1.1) Airframe/CFE ^(†)		2015	Bell Helicopter / Fort Worth TX	C / FPIF	NAVAIR	Aug 2015	Aug 2017	15	20,307.562	Υ		Jan 2014
1.1.1) Airframe/CFE ^(†)	1	2015	Bell Helicopter / Fort Worth TX	C / FPIF	NAVAIR	Aug 2015	May 2018	1	20,307.562	Υ		Jan 2014
1.1.1) Airframe/CFE ^(†)		2016	Bell Helicopter / Fort Worth TX	C / FPIF	NAVAIR	Jan 2016	Jun 2018	17	20,543.881	Υ		Jan 2014
1.1.1) Airframe/CFE ^(†)		2017	Bell Helicopter / Fort Worth TX	C / FPIF	NAVAIR	Feb 2017	Mar 2019	26	20,993.374	Υ		Jan 2016
1.1.1) Airframe/CFE ^(†)		2018	Bell Helicopter / Fort Worth TX	C / FPIF	NAVAIR	Aug 2018	Mar 2020	29	21,327.973	Υ		Jan 2017
1.1.1) Airframe/CFE ^(†)		2019	Bell Helicopter / Fort Worth TX	C / FPIF	NAVAIR	Jan 2019	Mar 2021	25	21,774.487	Υ		Jan 2018
1.1.3) Engines/Eng Acc (new) ^(†)		2015	General Electric Co. / Lynn, MA	C / IDIQ	AMCOM	Aug 2015	Jul 2016	30	804.949	Υ		Jan 2014
1.1.3) Engines/Eng Acc (new) ^(†)	1	2015	General Electric Co. / Lynn, MA	C / IDIQ	AMCOM	Aug 2015	Mar 2017	2	804.949	Υ		Jan 2014
1.1.3) Engines/Eng Acc (new) ^(†)		2016	General Electric Co. / Lynn, MA	C / IDIQ	AMCOM	Jan 2016	Apr 2017	34	819.754	Υ		Jan 2015
1.1.3) Engines/Eng Acc (new) ^(†)		2017	General Electric Co. / Lynn, MA	C / IDIQ	AMCOM	Jun 2017	Apr 2018	52	835.102	Υ		Jan 2016
1.1.3) Engines/Eng Acc (new) ^(†)		2018	General Electric Co. / Lynn, MA	C / IDIQ	AMCOM	Mar 2018	Feb 2019	58	849.961	Υ		Jan 2017
1.1.3) Engines/Eng Acc (new) ^(†)		2019	General Electric Co. / Lynn, MA	C / IDIQ	AMCOM	Jun 2019	Apr 2020	50	866.960	Y		Jan 2018

^(†) indicates the presence of a P-21

LI 0178 - UH-1Y/AH-1Z

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			ation / 1 / 1	Budge	t Acti	vity /	Budg	et Sı	ıb Ac	tivity		- 1	Line 8 / Uł				Title	:							Nun H-1Z		Title	[DOI	DIC]:		
			Cost E (Units	lements in Each)								Fiscal Ye	ear 2020											Fiscal Y							E
	_				ACCEPT									C	Calenda	r Year 20	20								Cale	ndar Yea	r 2021				L
M O F C R	: }	Y :	SERVICE	PROC QTY	PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	I C
1.1.1) Airfr	ame/C	CFE (1)															,													
			veries: 66																												
1	20	14 N	NAVY	10	10	0																									\top
1	20	15 N	NAVY	15	15	0																									
/ 1	20	15 N	NAVY	1	1	0																									
1	20	16 N	NAVY	17	17	0																									
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1	20	18 N	NAVY	29	0	29	-	-	-	-	-	3	2	3	:	2 3	3 2	3	2	3	2	2	2								
1	20	19 N	NAVY	25	0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	3	2	3	2	2
1.1.3) Eng	ines/E	Eng Acc (ne	ew) ⁽²⁾									·					•				·									
			veries: 48	,																											_
	_	15 N		30	30	0																									\top
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												0.		1001		•													
Exhibit P	-21, Pro	oducti	on Sc	hedul	le: PB	202	0 Na	vy														Date	e: Ma	rch 20	019				
Appropri 1506N / 0		Budge	t Acti	vity /	Budg	et Sı	ub A	ctivity	' :		Line 78 / U				Title	•							Nun AH-1Z	nber /	Title	[DOI	DIC]:		
		lements in Each)								Fiscal Y	ear 2022	2										Fiscal Y	ear 2023	3					В
	(55		ACCEPT										Calendar	Year 20	22				_		-			ndar Yea	r 2023				A L
M O F C R O # FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	A N C E
1.1.1) Airframe/	/CFE (1)																												
Prior Years Del																													_
1 2014	NAVY	10	10	0																									
1 2015	NAVY	15	15	0																									
√ 1 2015	NAVY	1	1	0																									
1 2016	NAVY	17	17	0																									
1 2017	NAVY	26	26	0																									
1 2018	NAVY	29	29	0																									
1 2019	NAVY	25	17	8	2	3	2	2 1																					
1.1.3) Engines/	/Eng Acc (ne	ew) ⁽²⁾																											
Prior Years Del																													
2 2015	NAVY	30	30	0																									
✓ 2 2015	NAVY	2	2	0																									
2 2016	NAVY	34	34																										
2 2017	NAVY	52	52																										
	NAVY	58	58																										
2 2019	NAVY	50	50	0								1			_		1		1			1							
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	U U	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	U J	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0178 / UH-1Y/AH-1Z	2 / AH-1Z

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFF	R					Ini	tial			Reo	rder	
Ref	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Bell Helicopter - Fort Worth TX	24	26	32	10	3	24	27	10	3	24	27
2	General Electric Co Lynn, MA	12	24	60	2	3	16	19	10	3	10	13

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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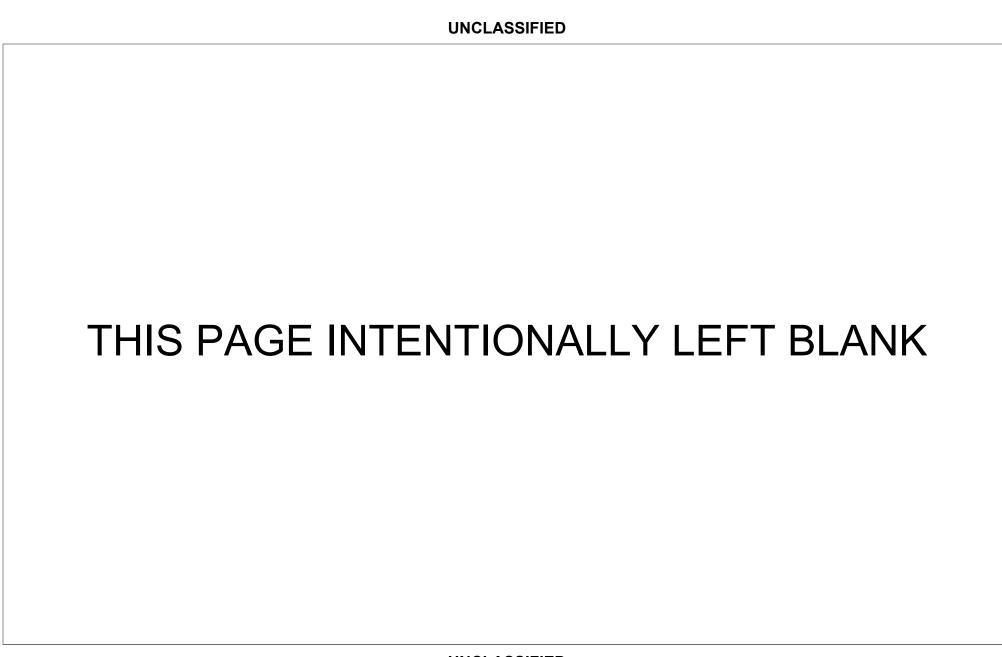


Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

0178 / UH-1Y/AH-1Z

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604245N

P-1 Line Item Number / Title:

Line Item MDAP/MAIS Code: 101

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Resource Summary	Itais	1 1 2010	1 1 2019	Dase	000	IOtai	1 1 2021	1 1 2022	1 1 2023	1 1 2024	Complete	IOtai
Gross/Weapon System Cost (\$ in Millions)	458.396	42.082	-	-	-	-	-	-	-	-	-	500.478
Net Procurement (P-1) (\$ in Millions)	458.396	42.082	-	-	-	-	-	-	-	-	-	500.478
Total Obligation Authority (\$ in Millions)	458.396	42.082	-	-	-	-	-	-	-	-	-	500.478

Description:

The mission of the AH-1Z attack helicopter is to provide rotary wing close air support, anti-armor, armed escort, armed/visual reconnaissance, anti-helicopter and point air defense and fire support coordination during day/night conditions. UH-1Y utility helicopter also provides command and control and combat assault support during day/night and reduced weather conditions. The UH-1Y/AH-1Z procurement strategy is to convert 37 AH-1W helicopters into AH-1Zs (complete), build 152 new AH-1Zs, remanufacture ten (10) H-1N helicopters into UH-1Ys (complete), and build 150 new UH-1Y models. The UH-1Y and AH-1Z share an 85 percent common footprint, which includes portions of maintenance planning, technical data, supply support, support equipment, facilities, and resources required at the intermediate and depot level maintenance activities for both structural and avionics items of repair.

Major modifications include a new 4-bladed rotor system with semiautomatic blade fold of the new composite rotor blades, performance-matched transmissions, a new 4-bladed tail rotor and drive system. upgraded landing gear, and pylon structural modifications. Both aircraft also incorporate common, modernized, and fully integrated cockpits/avionics that reduce operator work load and improve situational awareness and safety. The UH-1Y/AH-1Z aircraft have increased maneuverability, speed, and payload capability. Additionally, the AH-1Z upgrades the current Night Targeting Forward Looking InfraRed (FLIR) system to a 3rd generation, staring, focal plane array FLIR that significantly extends autonomous weapons engagement ranges.

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

0178 / UH-1Y/AH-1Z

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604245N

Line Item MDAP/MAIS Code: 101

	Exhibits Schedule		Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	
Exhibit Type	Title*	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-10	1 / UH-1Y			160 / 212.515	- / -	- / -	- / -	- / -	- / -
P-10	2 / AH-1Z			135 / 245.881	29 / 42.082	25 / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			295 / 458.396	29 / 42.082	25 / -	- 1 -	- 1 -	- 1 -

*Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

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P-1 Line #12

Exhibit P-10, Advance Procuremen	nt Requiren	nents Analysis (p	age 1 -	Budget Funding Justit	fication): PB 2020 Navy	Date: March 2019							
Appropriation / Budget Activity / B 1506N / 01 / 1	udget Sub	-		Item Number / Title: H-1Y/AH-1Z	P-5 Number / Title	:							
First System (2020) Award Date: January 2013	First Syste October 20	em (2020) Completion 15	Date:	Date: Interval Between Systems: 1 Months									
UH-1Y	Production Leadtime (Months)		Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)							
Quantity				160	-	-	-						
Cost Elements When			d	Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)						
CFE	·												
Dynamic Component Parts (mast assembly, reassembly, plys raw material, etc)	od end		8	23.421	-	-	-						
UH-1Y Cabin Materials			7	139.171	-	-	-						
Other (forgings, bearings, shafts, castings, bolts, pins, etc.)			13	49.923	-	-	-						
Total: CFE				212.515	-	-	0.00						
Total Advance December 106 inchies Aut	Il Advance Procurement/Obligation Authority				_								

LI 0178 - UH-1Y/AH-1Z Navy

Exhibit P-10, Advance Procurement Requirements Analysis	(page 2 - Budget Funding Justification): PB 2020 Navy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	P-5 Number / Title:
1506N / 01 / 1	0178 / UH-1Y/AH-1Z	1 / UH-1Y

			FY 2020								
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)				
CFE											
Dynamic Component Parts (mast assembly, rod end assembly, plys raw material, etc)	0						-				
UH-1Y Cabin Materials	0						-				
Other (forgings, bearings, shafts, castings, bolts, pins, etc.)	0						-				
Total: CFE							0.000				
Total Advance Procurement/Obligation Authority							-				

Description:

Final delivery of all advanced procurement items in support of UH-1Y have been completed.

LI 0178 - UH-1Y/AH-1Z

Navy

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Exhibit P-10, Advance Procuren	nent Requirements Ana	alysis (<i>page 1 - l</i>	Budget Funding Justific	cation): PB 2020 Navy	Date: March 2019							
Appropriation / Budget Activity 1506N / 01 / 1	/ Budget Sub Activity:	P-1 Line It 0178 / UH	tem Number / Title: -1Y/AH-1Z	P-5 Number / Title: 2 / AH-1Z								
First System (2020) Award Date: January 2013	First System (2020) C October 2015	ompletion Date:	Interval Between Systems: 1 Months									
AH-1Z	I	tion Leadtime (Months)	Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)						
Quantity			135	29	25	-						
Cost Elements	n Required (Months)	Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)							
CFE	·	<u> </u>	<u> </u>		<u> </u>							
AH-1Z Cabin Materials		7	158.792	27.184	-	-						
Dynamic Component Parts Dynamic Component Parts (mast assembly, rod end assembly, plys raw material)		8	27.780	4.751	0.000	-						
Other (forgings, bearings, shafts, castings,	her (forgings, bearings, shafts, castings, bolts, pins, etc.)		59.309	10.147	-	-						
Total: CFE	otal: CFE		245.881	42.082	-	0.000						
Total Advance Procurement/Obligation	Authority		245.881	42.082	-	-						

Exhibit P-10, Advance Procurement Requirements Analysis	(page 2 - Budget Funding Justification): PB 2020 Navy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	P-5 Number / Title:
1506N / 01 / 1	0178 / UH-1Y/AH-1Z	2 / AH-1Z

				FY 2	2020		
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)
CFE							
AH-1Z Cabin Materials	0						-
Dynamic Component Parts Dynamic Component Parts (mast assembly, rod end assembly, plys raw material)	1						-
Other (forgings, bearings, shafts, castings, bolts, pins, etc.)	0						-
Total: CFE							0.000
Total Advance Procurement/Obligation Authority							-

Description:

The Advance Procurement (AP) funding will be used to procure long lead CFE items (24 months or greater production lead time) such as raw materials (inclusive of steel, titanium, aluminum, composites), castings, forgings, bearings, actuators, tube assemblies, panel assemblies, gearboxes and airframe structural components. H-1 lead times for components have been as high as 59 months. The H-1 program has been actively pursuing lead time reductions and the current longest lead component is in excess of 43 months (mast forging). Some specific material lead items are other forgings (39 months), bearings (37 months), actuators (28 months). All of these long lead items are essential to maintaining the current schedule in support of the Fleet Marine Forces and the transition to the UH-1Y and the AH-1Z.

LI 0178 - UH-1Y/AH-1Z
Navy

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0182 / MH-60R

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 191

	Prior			FY 2020	FY 2020	FY 2020					То		
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total	
Procurement Quantity (Units in Each)	278	8	-	-	-	-	-	-	-	-	-	286	
Gross/Weapon System Cost (\$ in Millions)	11,036.154	400.000	0.000	0.894	0.000	0.894	0.000	0.000	0.000	0.000	-	11,437.048	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P-1) (\$ in Millions)	11,036.154	400.000	0.000	0.894	0.000	0.894	0.000	0.000	0.000	0.000	-	11,437.048	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	11,036.154	400.000	0.000	0.894	0.000	0.894	0.000	0.000	0.000	0.000	-	11,437.048	
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	ed elsewhere.)					
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Flyaway Unit Cost (\$ in Thousands)	34,236.996	49,375.000	-	-	-	-	-	-	-	-	-	34,660.437	
Gross/Weapon System Unit Cost (\$ in Thousands)	39,698.396	50,000.000	-	-	-	-	-	-	-	-	-	39,989.678	

Description:

The MH-60R Multi-Mission helicopter provides battle group protection and adds significant capability in coastal littorals and regional conflicts. The MH-60R Multi-Mission Helicopter represents a significant avionics improvement to the H-60 series helicopters by enhancing primary mission areas of Anti-Submarine Warfare, Electronic Warfare, and Surface Warfare which includes the fast attack craft/fast in-shore attack craft (FAC/FAIC) threat response capabilities. Secondary MH-60R mission areas include search and rescue, vertical replenishment, naval surface fire support, logistics support, naval special warfare, and strike warfare. Airborne Low Frequency Sonar is added to enhance the existing acoustics suite. An added Multi-Mode Radar includes an Inverse Synthetic Aperture Radar mode (permits stand-off classification of hostile threats). An improved Electronics Surveillance Measures system will enable passive detection and targeting of radar sources not currently detectable. Pre-Planned Product Improvements includes upgrades to communication, navigation, Identification Friend or Foe, Multi-Spectral Targeting System/Forward Looking Infrared, radar, weapons, data link, safety, maintenance, airframe and mission planning systems.

Notes:

- 1. Prior Years Initial Spares should reflect \$300.565 vice \$0.000.
- 2. Totals may not add due to rounding.

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Navy

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P-1 Line #13

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0182 / MH-60R

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 191

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	1 / MH-60R (MYP)	P-5a			278 / 11,036.154	8 / 400.000	- / 0.000	- / 0.894	- / 0.000	- / 0.894
P-40	Total Gross/Weapon System Cost				278 / 11,036.154	8 / 400.000	- / 0.000	- / 0.894	- / 0.000	- / 0.894

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2018 includes a congressional add of 8 aircraft for \$400 Million to maintain the MH-60R production line.

FY 2020 funding in the amount of \$.894M will be utilized to support the final deliveries in FY2020-2021 of the 8 aircraft added in the FY2018.

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Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:
1506N / 01 / 1

P-1 Line Item Number / Title:
0182 / MH-60R

Item Number / Title [DODIC]:
1 / MH-60R (MYP)

					` ,	
ID Code (A=Service Ready, B=Not Service Ready):	·	MD	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	278	8	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	11,036.154	400.000	0.000	0.894	0.000	0.894
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	11,036.154	400.000	0.000	0.894	0.000	0.894
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	11,036.154	400.000	0.000	0.894	0.000	0.894
(The following Resource Summary rows are for informa	tional purposes only. The corr	esponding budget requests	are documented elsewher	e.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	39,698.396	50,000.000	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

LI 0182 - MH-60R

	F	Prior Years			FY 2018			FY 2019		FY	FY 2020 Base FY 2020 OCO			0	FY 2020 Total			
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost					,													
Recurring Cost																		_
1.1.1) Airframe/CFE ^(†)	15,114.374	278	4,201.796	22,768.875	8	182.151	-	-	-	-	-	-	-	-	-	-	-	-
1.1.2) CFE Electronics ^(†)	8,225.500	278	2,286.689	20,936.250	8	167.490	-	-	-	-	-	-	-	-	-	-	-	-
1.1.3) GFE Electronics ^(†)	4,252.399	278	1,182.167	1,281.375	8	10.251	-	-	-	-	-	-	-	-	-	-	-	-
1.1.4) Engines/Eng Acc	663.989	522	346.602	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.5) Engines (CCAD Refurb)	246.214	14	3.447	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.6) Engines (GE Refurb) ^(†)	333.250	20	6.665	303.438	16	4.855	-	-	-	-	-	-	-	-	-	-	-	-
1.1.7) Other GFE	679.022	278	188.768	51.625	8	0.413	-	-	-	-	-	-	-	-	-	-	-	-
1.1.8) Rec Flyaway ECO	53.919	273	14.720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	8,230.854	-	-	365.160	-	-	-	-	-	-	-	-	-	-	-	-
Non Recurring Cost					,													
1.2.1) Non-Recur Cost	-	-	554.074	-	-	2.000	-	-	-	-	-	-	-	-	-	-	-	-
1.2.2) Production Line Shutdown	-	-	1.140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2.3) Acquisition Program Closeout	-	-	63.424	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0182 / MH-60R	1 / MH-60R (MYP)

ID Code (A=Service Ready, B=Not Service Ready):

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

MDAP/MAIS Code:

	F	Prior Years	6		FY 2018			FY 2019		F	/ 2020 Bas	se	F`	Y 2020 OC	0	F۱	/ 2020 Tot	:al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
1.2.4) Ancillary Eqpt (2)	-	-	668.393	-	-	27.840	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	1,287.031	-	-	29.840	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Flyaway Cost	-	-	9,517.885	-	-	395.000	-	-	-	-	-	-	-	-	-	-	-	
Support Cost				,												,		
2.1) Airframe PGSE	-	-	73.810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.2) Engine PGSE	-	-	2.215	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.3) Avionics PGSE	-	-	335.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4) PEC Training Equipment	-	-	403.789	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5) Pubs/Tech Data	-	-	30.407	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.6) Other ILS	-	-	83.987	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.7) Field Activities (3)	-	-	450.493	-	-	5.000	-	-	-	-	-	0.894	-	-	-	-	-	0.8
2.8) Production Line Support	-	-	138.565	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support Cost	-	-	1,518.269	-	-	5.000	-	-	-	-	-	0.894	-	-	-	-	-	0.8
Gross/Weapon System Cost	39,698.396	278	11,036.154	50,000.000	8	400.000	-	-	0.000	-	-	0.894	-	-	0.000	-	-	0.89

^(†) indicates the presence of a P-5a

Footnotes:

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⁽¹⁾ Cost Element 1.2.1 Non-Recur Costs FY 2018 funding to correct obsolescence issues required for production of the 8 FY 2018 aircraft.

⁽²⁾ Cost Element 1.2.4 Ancillary equipment is for the procurement of the Airborne Low Frequency Sonar.

⁽³⁾ Cost Element 2.7 Field Activities FY 2020 funds provide support for final delivery of aircraft and ancillary equipment, final Contract Data Requirements List (CDRL), and contract closeout efforts.

Exhibit P-5a, Procurement History and Planning: PB 2020 N	lavy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0182 / MH-60R	1 / MH-60R (MYP)

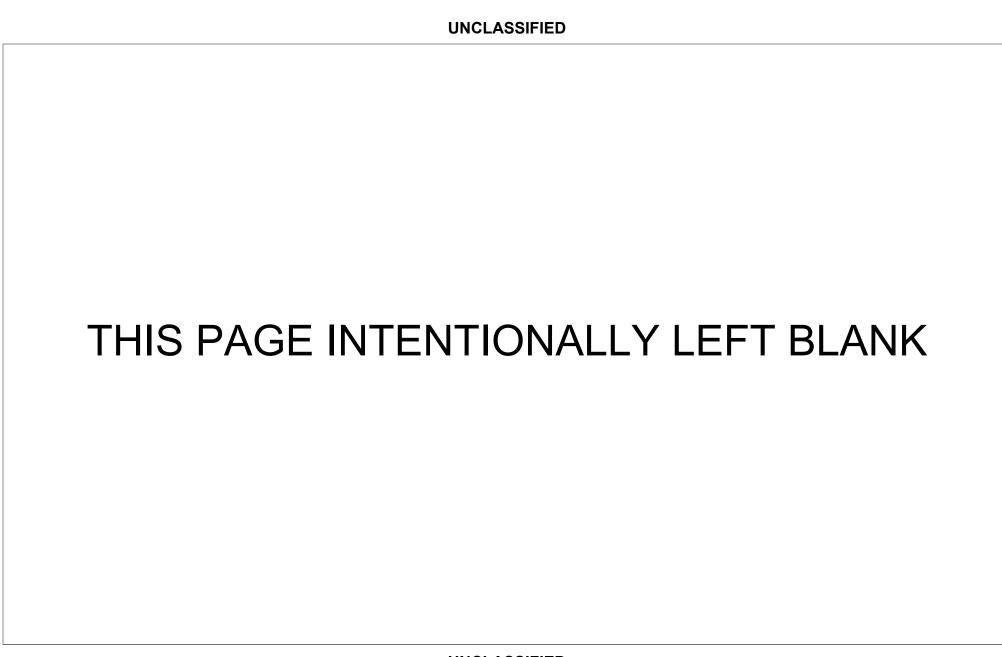
	0			Method/Type		Award	Date of First			Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	or Funding Vehicle	Location of PCO	Date	Delivery	Qty (Each)	Unit Cost	Now?		Date
1.1.1) Airframe/CFE		2018	Lockheed Martin / Owego, NY	SS / FFP	NAVAIR	Jul 2019	Jun 2020	8	22,768.875	Υ		Jun 2018
1.1.2) CFE Electronics		2018	Lockheed Martin / Owego, NY	SS / FFP	NAVAIR	Jul 2019	Jun 2020	8	20,936.250	Υ		Jun 2018
1.1.3) GFE Electronics		2018	Lockheed Martin / Owego, NY	SS / FFP	NAVAIR	Jul 2019	Jun 2020	8	1,281.375	Υ		Jun 2018
1.1.6) Engines (GE Refurb)		2018	General Electric Company / Lynn, MA	SS / FFP	NAVAIR	May 2018	Dec 2018	16	303.438	Υ		Nov 2013

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Program Elements for Code B Items: 0605500N

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0193 / P-8A Poseidon

Aircraft

cran

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 334

ID Code (A=Service Ready, B=Not Service Ready): A

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	91	10	10	6	-	6	-	-	-	-	-	117
Gross/Weapon System Cost (\$ in Millions)	18,831.420	1,840.515	1,908.367	1,386.701	0.000	1,386.701	80.325	0.000	0.000	0.000	-	24,047.328
Less PY Advance Procurement (\$ in Millions)	1,577.879	130.873	146.614	180.000	-	180.000	-	-	-	-	-	2,035.366
Net Procurement (P-1) (\$ in Millions)	17,253.541	1,709.642	1,761.753	1,206.701	0.000	1,206.701	80.325	0.000	0.000	0.000	-	22,011.962
Plus CY Advance Procurement (\$ in Millions)	1,714.766	140.600	180.000	-	-	-	-	-	-	-	-	2,035.366
Total Obligation Authority (\$ in Millions)	18,968.307	1,850.242	1,941.753	1,206.701	0.000	1,206.701	80.325	0.000	0.000	0.000	-	24,047.328
(The following	Resource Sumr	nary rows are fo	r informational p	urposes only. Th	e corresponding	budget requests	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	100.111	37.428	0.010	-	0.010	-	-	-	-	-	137.549
Flyaway Unit Cost (\$ in Thousands)	171,708.703	167,660.600	171,251.200	186,620.833	-	186,620.833	-	-	-	-	-	172,774.872
Gross/Weapon System Unit Cost (\$ in Thousands)	206,938.681	184,051.500	190,836.700	231,116.833	-	231,116.833	-	-	-	-	-	205,532.718

Description:

The P-8A Multi-mission Maritime Aircraft (MMA) system is a heavily modified and militarized derivative of Boeing's 737-800 ERX commercial aircraft. The P-8A is the replacement system for the P-3C. The P-8A will sustain and improve the armed maritime and littoral Intelligence, Surveillance, and Reconnaissance capabilities for U.S. Naval Forces in traditional, joint and combined roles to counter changing and emerging threats. The P-8A will have a substantial role in Sea Power 21 and will satisfy several mission requirements in Sea Shield, Sea Strike and FORCEnet. The primary roles of the P-8A are persistent Anti-Submarine Warfare (ASW) and Anti-Surface Warfare (ASW). The procurement funds the production of the aircraft, trainers and associated support equipment.

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0193 / P-8A Poseidon

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0605500N

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 334

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	1 / P-8A MULTI-MISSION MARITIME AIRCRAFT (MMA)	P-5a, P-21			91 / 18,831.420	10 / 1,840.515	10 / 1,908.367	6 / 1,386.701	- / 0.000	6 / 1,386.701
P-40	Total Gross/Weapon System Cost				91 / 18,831.420	10 / 1,840.515	10 / 1,908.367	6 / 1,386.701	- / 0.000	6 / 1,386.701

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY2020 procurement funds are required for 6 Full Rate Production aircraft with associated equipment and support.

FY2020 unit cost increased due to the expected reduction in Boeing P-8A build/manufacturing capacity resulting from a USN procurement of 6 aircraft. Boeing is currently building P-8A at a rate of 18 per year, and based on the FY2020 lower requirement, will reduce that capacity accordingly. Combined with the negative efficiency impacts associated with completion of Boeing's transition of its 737NG production line, which is the variant used to build the P-8A, to the 737 MAX commercial aircraft (estimated to be complete in 4QFY2019), Boeing is optimizing its manufacturing line to more heavily focus on the competitive 737MAX commercial market place. The market price benefits previously realized by P-8A will significantly be reduced as the 737NG will no longer be built for commercial customers.

The FY2020 aircraft procurement is a new quantity acquisition requirement and requires fully funded FY19 Advanced Procurement (AP) to support the FY2020 requested aircraft. Based on Boeing's production line transition, reduction in P-8A throughput, and the impact on the aircraft manufacturing line and CFE supplier base, \$30M of AP is required per aircraft (an increase from the historical requirement of ~\$20M per aircraft) was required in order to maintain the required P-8A manufacturing line and delivery schedule.

FY2020 is the last year of production. Per Navy policy, FY2020 Production Engineering Support and Other ILS requirements include 30 months of funding impacts associated with supporting FY2020 funded aircraft manufacturing, delivery, and fielding in the final year of procurement, that are otherwise annually funded. Final aircraft delivery is planned for 2QFY23.

LI 0193 - P-8A Poseidon

Navy

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Exhibit P-5, Cost Analysis: PB 2020 Navy Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Item Number / Title [DODIC]:1506N / 01 / 10193 / P-8A Poseidon1 / P-8A MULTI-MISSION MARIT

0193 / P-8A Poseidon 1 / P-8A MULTI-MISSION MARITIME AIRCRAFT (MMA)

AIRCRAFT (MMA

ID Code (A=Service Ready, B=Not Service Ready):		IVIL	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	91	10	10	6	-	6
Gross/Weapon System Cost (\$ in Millions)	18,831.420	1,840.515	1,908.367	1,386.701	0.000	1,386.701
Less PY Advance Procurement (\$ in Millions)	1,577.879	130.873	146.614	180.000	-	180.000
Net Procurement (P-1) (\$ in Millions)	17,253.541	1,709.642	1,761.753	1,206.701	0.000	1,206.701
Plus CY Advance Procurement (\$ in Millions)	1,714.766	140.600	180.000	-	-	-
Total Obligation Authority (\$ in Millions)	18,968.307	1,850.242	1,941.753	1,206.701	0.000	1,206.701
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	s are documented elsewher	re.)	-	
Initial Spares (\$ in Millions)	-	100.111	37.428	0.010	-	0.010
Gross/Weapon System Unit Cost (\$ in Thousands)	206,938.681	184,051.500	190,836.700	231,116.833	-	231,116.833

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	S		FY 2018		FY 2019			F۱	/ 2020 Ba	se	FY	/ 2020 OC	0	FY	′ 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	'		'	'	'		'	'		'			'		'	'		'
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	124,562.923	91	11,335.226	122,019.980	10	1,220.200	124,896.749	10	1,248.967	133,659.383	6	801.956	-	-	-	133,659.383	6	801.9
1.1.2) CFE Electronics	-	-	2,652.154	-	-	196.183	-	-	199.518	-	-	122.105	-	-	-	-	-	122.1
1.1.3) GFE Electronics	-	-	742.758	-	-	140.019	-	-	142.399	-	-	87.148	-	-	-	-	-	87.1
1.1.4) Other GFE	-	-	1.521	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.1.5) Rec Flyaway ECO	-	-	479.029	-	-	35.477	-	-	36.080	-	-	22.081	-	-	-	-	-	22.0
Subtotal: Recurring Cost	-	-	15,210.688	-	-	1,591.879	-	-	1,626.964	-	-	1,033.290	-	-	-	-	-	1,033.2
Non Recurring Cost																		
1.2.1) Ancillary Equip	-	-	66.137	-	-	39.430	-	-	40.101	-	-	40.903	-	-	-	-	-	40.9
1.2.2) Non-Recur Cost	-	-	348.667	-	-	45.297	-	-	45.447	-	-	45.532	-	-	-	-	-	45.5
Subtotal: Non Recurring Cost	-	-	414.804	-	-	84.727	-	-	85.548	-	-	86.435	-	-	-	-	-	86.4
Subtotal: Flyaway Cost	-	-	15,625.492	-	-	1,676.606	-	-	1,712.512	-	-	1,119.725	-	-	-	-	-	1,119.7
Support Cost																		
2.1) Airframe PGSE	-	-	253.988	-	-	15.328	-	-	15.588	-	-	15.900	-	-	-	-	-	15.9
2.2) Engine PGSE	-	-	15.536	-	-	0.854	-	-	0.188	-	-	-	-	-	-	-	-	
2.3) Avionics PGSE	-	-	776.328	-	-	30.749	-	-	31.272	-	-	31.897	-	-	-	-	-	31.8

LI 0193 - P-8A Poseidon Navy

Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 01 / 1	0193 / P-8A Poseidon	Item Number / Title [DODIC]: 1 / P-8A MULTI-MISSION MARITIME AIRCRAFT (MMA)

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

		Prior Years	<u> </u>		FY 2018			FY 2019		F'	′ 2020 Ba	Se.	F'	Y 2020 OC	:O	F'	Y 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost		Total Cost (\$ M)									
2.4) Pec Trng Eq (4)	-	-	1,410.636	-	-	24.764	-	-	54.601	-	-	55.796	-	-	-	-	-	55.796
2.5) Pub/Tech Eq	-	-	235.579	-	-	31.635	-	-	32.949	-	-	33.608	-	-	-	-	-	33.608
2.6) Prod Eng Supt (5)	-	-	202.600	-	-	24.244	-	-	24.924	-	-	53.335	-	-	-	-	-	53.335
2.7) Other ILS (6)	-	-	311.261	-	-	36.335	-	-	36.333	-	-	76.440	-	-	-	-	-	76.440
Subtotal: Support Cost	-	-	3,205.928	-	-	163.909	-	-	195.855	-	-	266.976	-	-	-	-	-	266.976
Gross/Weapon System Cost	206,938.681	91	18,831.420	184,051.500	10	1,840.515	190,836.700	10	1,908.367	231,116.833	6	1,386.701	-	-	0.000	231,116.833	6	1,386.701

Remarks:

NOTES: Totals may not add due to rounding.

Footnotes:

- (1) FY2020 unit cost increased due to the expected reduction in Boeing P-8A build/manufacturing capacity resulting from a USN procurement of 6 aircraft. Boeing is currently building P-8A at a rate of 18 per year, and based on the FY2020 lower requirement, will reduce that capacity accordingly. Combined with the negative efficiency impacts associated with completion of Boeing's transition of its 737NG production line, which is the variant used to build the P-8A, to the 737 MAX commercial aircraft (estimated to be complete in 4QFY2019), Boeing is optimizing its manufacturing line to more heavily focus on the competitive 737MAX commercial market place. The market price benefits previously realized by P-8A will significantly be reduced as the 737NG will no longer be built for commercial customers.
- (2) The Ancillary Equipment includes Fleet critical Advanced Airborne Sensor (AAS) roll on/roll off kits and deployment Mechanisms. Annual quantities are independent from aircraft procurement quantities and are based on Fleet operational requirements in each year. Procurement profile for AAS kits and Mechanisms are as follows: Prior Years 8 AAS Kits and 9 airborne Mechanisms; FY18 6 AAS kits and 7 Mechanisms; FY19 8 AAS kits and 8 Mechanisms; FY20 8 AAS kits and 8 Mechanisms for a total procurement of 30 AAS kits and 32 Mechanisms to be fielded on the 117 aircraft.
- (3) FY20 NRE is required to support Diminishing Manufacturing Source Material Shortages (DMSMS) and electronic component level obsolescence redesign, test and integration. The program anticipates impacts associated with maintaining a 737NG series production line operating following Boeing's commercial line transition to the 737MAX, as well as commercially based impacts associated with P-8A Mission Computing Display System hardware and software components, aircraft internal communication system, and acoustic warfare system which will all require NRE.
- (4) FY20 Peculiar Training equipment requirements include upgrades to previously fielded Fleet operational flight and weapons systems trainers, electronic classrooms, courseware, and mission systems and deployable mission readiness trainers at NAS Jacksonville, FL and NAS Whidbey Island, WA that enable P-8A aircrews to conduct cost effective ground based combat readiness training on the updated capabilities being delivered in P-8A production line aircraft. FY20 includes upgrades to Anti-Submarine and Surface Warfare (ASW/ASuW) targeting, electronic warfare coordination, communications, and weapons integration. Peculiar Training decreases are due to Navy budget affordability (not a change in requirements). However, since there is no change in the requirement, the trainers will have to be descoped of capabilities.
- (5) FY20 is the last year of production. Per Navy policy, FY20 Production Engineering Support requirements include 30 months of funding impacts associated with supporting FY20 funded aircraft manufacturing, delivery, and fielding in the final year of procurement, that are otherwise annually funded. Final aircraft delivery is planned for 2QFY23.
- (6) FY20 is the last year of production. Per Navy policy, FY20 Other ILS requirements include 30 months of funding impacts associated with supporting FY20 funded aircraft manufacturing, delivery, and fielding in the final year of procurement, that are otherwise annually funded. Final aircraft delivery is planned for 2QFY23.

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^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2020 Navy		Date: March 2019
	Line Item Number / Title: 3 / P-8A Poseidon	Item Number / Title [DODIC]: 1 / P-8A MULTI-MISSION MARITIME AIRCRAFT (MMA)

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
1.1.1) Airframe/CFE ^(†)		2014	The Boeing Company (7) I Seattle, WA	SS / FPIF	NAVAIR	Mar 2014	May 2016	17	126,195.588	Y		Jun 2012
1.1.1) Airframe/CFE ^(†)		2015 ⁽⁸⁾	The Boeing Company (7) I Seattle, WA	SS / FPIF	NAVAIR	Aug 2015	May 2017	9	121,864.875	Y		Mar 2014
1.1.1) Airframe/CFE ^(†)		2016	The Boeing Company (7) I Seattle, WA	SS / FPIF	NAVAIR	Feb 2016	Jan 2018	17	121,587.488	Y		Mar 2014
1.1.1) Airframe/CFE ^(†)		2017	The Boeing Company (7) I Seattle, WA	SS / FFP	NAVAIR	Apr 2017	Mar 2019	11	122,761.324	Y		Nov 2015
1.1.1) Airframe/CFE ^(†)		2018	The Boeing Company (7) I Seattle, WA	SS / FFP	NAVAIR	Dec 2017	Mar 2020	10	122,019.980	Y		Nov 2015
1.1.1) Airframe/CFE ^(†)		2019 ⁽⁹⁾	The Boeing Company (7) I Seattle, WA	SS / FFP	NAVAIR	Jan 2019	Nov 2020	10	124,896.749	Y		Nov 2015
1.1.1) Airframe/CFE ^(†)		2020	The Boeing Company (7) I Seattle, WA	SS / FFP	NAVAIR	Apr 2020	Apr 2022	6	133,659.383	Y		Nov 2018

^(†) indicates the presence of a P-21

Footnotes:

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⁽⁷⁾ Manufacturer Production Lead Time does not reflect additional 10-month lead time required for long lead items procured through the Advance Procurement contract.

⁽⁸⁾ FY2015 through FY2017 unit costs include the benefits of the Royal Australian Air Force (RAAF) procuring 4 aircraft in each year concurrently with the Navy. FY2017 through FY2019 include the additional benefits of the United Kingdom procuring 2 aircraft in FY2017, 3 in FY2018 and 4 in FY 2019. FY2019 also includes the benefit of Norway procuring 5 aircraft.

⁽⁹⁾ FY18 Advanced Procurement (AP) funds 7 aircraft in FY19. PB19 budget requests 10 aircraft in FY19. The program will mitigate the FY18 AP shortfall by prioritizing initial AP procurement of only the longest lead items and by accelerating the definitized aircraft contract award from April 2019 to January 2019. This enables the program to maintain the required P-8A manufacturing and delivery schedule. Accelerated contract award is possible in FY19 leveraging a negotiated price option on the existing base contract.

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			lements in Each)								Fiscal \	rear 2014											Fiscal Y	ear 2015					
				ACCEPT									-	Calenda	Year 20	14								Calen	dar Year	2015			
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		e/CFE (1)								'																			
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1	2015	NAVY	9	0	9																							Α -	-
1	2016	NAVY	17 ⁽¹¹⁾	0	17																								
1	2017	NAVY	11	0	11																								
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Ex	hibit	: P-21, Pr	oducti	on Sc	hedu	le: PE	3 202	 20 Nav	vy														Date	: Mar	ch 20)19				
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	1 201	6 NAVY	17 ⁽¹¹⁾	0	17					Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	lements in Each)			_					Fiscal Yo	ear 2020				•		,					Fiscal Y	ear 2021		2004			
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) Airframe/CFE ⁽¹⁾																											
Years Deliveries: 37																											
2014 NAVY	17 ⁽¹⁰⁾	17																									
2015 NAVY	9 (44)	9																									
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propriation / B 06N / 01 / 1	Budge	t Acti	ivity /	Budg	et Sι	ıb Ac	tivity:			Line 3 / P-				Title:							1 / P	-8A N		I-MIS	[DOI SION	DIC]: MAR	ITIME
Cost Ele (Units in	ements n Each)								Fiscal Y	ear 2022											Fiscal Ye	ar 2023					
4		ACCEPT PRIOR	BAL						ı		C	alendar	Year 202	22								Caler	ıdar Yeaı	r 2023			
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1) Airframe/CFE (1)				Į.			l l														,						
Years Deliveries: 37																											
1 2014 NAVY	17 ⁽¹⁰⁾	17																									
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1 2016 NAVY	17 (11)	17																									
1 2017 NAVY 1 2018 NAVY	11	11																									
1 2019 NAVY	10	10																									
1 2020 NAVY	6	0		-	-	-	-	-	-	1	-	-	1	-	1	-	1	-	1	-	1						

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P-1 Line #14

Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
, , , , , , , , , , , , , , , , , , , ,	0193 / P-8A Poseidon	Item Number / Title [DODIC]: 1 / P-8A MULTI-MISSION MARITIME AIRCRAFT (MMA)

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						lr	itial			Reo	rder	
Ref	Manufacturer				ALT	ALT	Manufacturing	Total	ALT	ALT	Manufacturing	Total
#	Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	Prior to Oct 1	After Oct 1	PLT	After Oct 1	Prior to Oct 1	After Oct 1	PLT	After Oct 1
	The Boeing Company ⁽⁷⁾ - Seattle, WA	6	18	30	9	-	34	41	9	7	23	30

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

- (7) Manufacturer Production Lead Time does not reflect additional 10-month lead time required for long lead items procured through the Advance Procurement contract.
- (10) One (1) additional FY14 funded aircraft (total 17) and one (1) FY16 funded aircraft (total 17) were procured via the FY16 Lot 7 contract as a result of The Department of the Navy's Congressional Notification of the use of Buy to Budget authority under 10 U.S.C. 2308 received on February 22, 2016. Because these aircraft did not include any Advanced Procurement funding, the delivery schedules extend beyond the planned 12 month period applicable for the remainder of the FY16 Lot 7 aircraft.
- (11) The delivery schedules for FY16 Lot 7 aircraft extend beyond the 12-month planned period because the Buy to Budget aircraft did not include Advanced Procurement funding.

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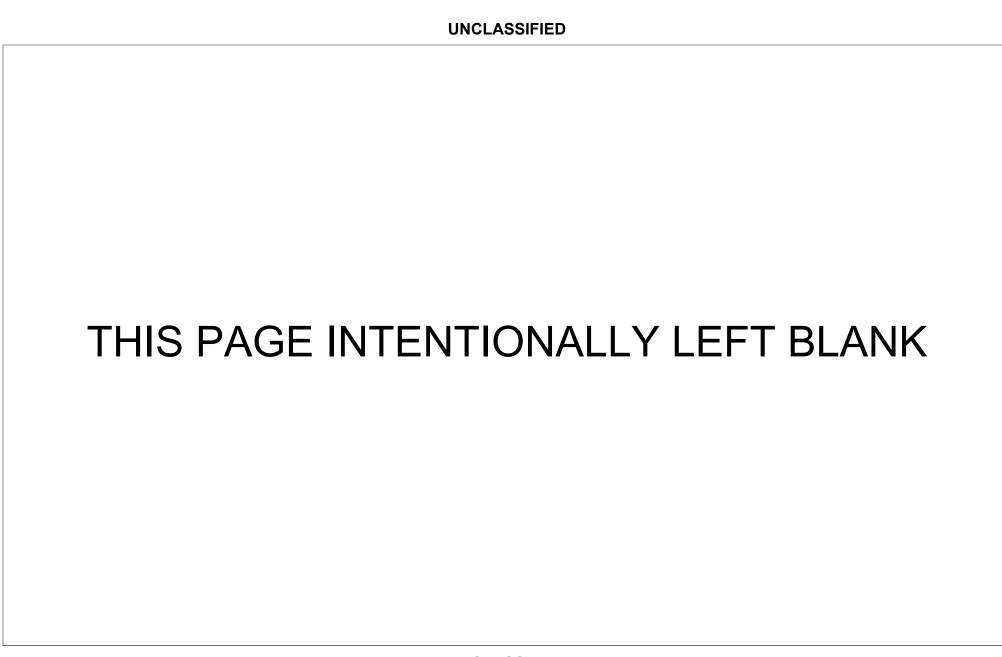


Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

0193 / P-8A Poseidon

Program Elements for Code B Items: 0605500N

Other Related Program Elements: N/A

P-1 Line Item Number / Title:

Line Item MDAP/MAIS Code: 334

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Gross/Weapon System Cost (\$ in Millions)	1,714.766	140.600	180.000	-	-	-	-	-	-	-	-	2,035.366
Net Procurement (P-1) (\$ in Millions)	1,714.766	140.600	180.000	-	-	-	-	-	-	-	-	2,035.366
Total Obligation Authority (\$ in Millions)	1,714.766	140.600	180.000	-	-	-	-	-	-	-	-	2,035.366

Description:

The P-8A Multi-mission Maritime Aircraft (MMA) system is a heavily modified and militarized derivative of Boeing's 737-800 ERX commercial aircraft. The P-8A is the replacement system for the P-3C. The P-8A will sustain and improve the armed maritime and littoral Intelligence, Surveillance, and Reconnaissance capabilities for U.S. Naval Forces in traditional, joint and combined roles to counter changing and emerging threats. The P-8A will have a substantial role in Sea Power 21 and will satisfy several mission requirements in Sea Shield, Sea Strike and FORCEnet. The primary roles of the P-8A are persistent Anti-Submarine Warfare (ASW) and Anti-Surface Warfare (ASuW). The Advanced Procurement funds the long lead time items required for production of the aircraft.

 LI 0193 - P-8A Poseidon
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 Navy
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 P-1 Line #15

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

0193 / P-8A Poseidon

Program Elements for Code B Items: 0605500N

Other Related Program Elements: N/A

P-1 Line Item Number / Title:

Line Item MDAP/MAIS Code: 334

	Exhibits Schedule	·		Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-10	1 / P-8A MULTI-MISSION MARITIME AIRCRAFT (MMA)			91 / 1,714.766	10 / 140.600	10 / 180.000	6/ -	- / -	6/ -
P-40	Total Gross/Weapon System Cost			91 / 1,714.766	10 / 140.600	10 / 180.000	6/ -	- 1 -	6/ -

^{*}Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY2020 aircraft procurement is a new quantity acquisition requirement and requires fully funded FY19 Advanced Procurement (AP) to support the FY2020 requested aircraft. Based on Boeing's production line transition, reduction in P-8A throughput, and the impact on the aircraft manufacturing line and CFE supplier base, \$30M of AP is required per aircraft (an increase from the historical requirement of ~\$20M per aircraft) was required in order to maintain the required P-8A manufacturing line and delivery schedule.

The Advance Procurement (AP) funding will be used to procure long lead CFE items such as basic commercial aircraft long lead requirements (33 months); mission/weapons systems components and P-8A unique airframe components (24 months or greater production lead time). AP funding will also be used to procure long lead mission/weapons systems GFE components (up to 24 months production lead time) due to the change in acquisition strategy as part of the program's overall Should Cost Plan to reduce costs per the DoD's Better Buying Power initiative. FY15 and FY16 AP funded EOQ for FY16-19 for the GFE APY10 Radar Multi-year Procurement. All of these long lead items are essential to maintaining the current schedule in support of the US Navy Fleet Maritime Patrol and Reconnaissance (MPRA) force transition from P-3C to P-8A.

 LI 0193 - P-8A Poseidon
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 P-1 Line #15

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Exhibit P-10, Advance Procurement Requirer	nents Analysi	s (page 1 - E	Budget Funding Justifica	<i>tion</i>): PB 2020 Navy	Date: March 2019	
Appropriation / Budget Activity / Budget Sub 1506N / 01 / 1	Activity:	P-1 Line Ite 0193 / P-8	em Number / Title: A Poseidon		P-5 Number / Title: 1 / P-8A MULTI-MIS AIRCRAFT (MMA)	SION MARITIME
First System (2020) Award Date: First System January 2013 First System January 2013	em (2020) Comple 013	etion Date:		Interval Between Syste 0 Months	ems:	
P-8A MULTI-MISSION MARITIME AIRCRAFT (MMA)	Production L		Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)
Quantity			91	10	10	6
Cost Elements	When Rec		Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)
CFE						
CFE - Airframe ⁽⁴⁾		0	979.441	0.000	0.000	0.000
For FY 15 CFE - Airframe		0	152.044	-	-	-
For FY 16 CFE - Airframe		0	193.076	-	-	-
For FY 17 CFE - Airframe		0	235.274	-	-	-
For FY 18 CFE - Airframe		0	123.140	-	-	-
For FY 19 CFE - Airframe		0	-	140.600	-	-
For FY20 CFE/GFE - Airframe ⁽⁵⁾		0	-	-	180.000	-
Total: CFE			1,682.975	140.600	180.000	0.000
EOQ			·	·	·	
For FY 2016 EOQ/Long Lead		0	10.311	-	-	-
For FY 2017 EOQ/Long Lead		0	7.733	-	-	-
For FY 2018 EOQ/Long Lead		0	7.733	-	-	-
For FY 2019 EOQ/Long Lead		0	6.014	-	-	-
Total: EOQ			31.791	-	-	0.000
Total Advance Procurement/Obligation Authority			1,714.766	140.600	180.000	-

LI 0193 - P-8A Poseidon Navy

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0193 / P-8A Poseidon

P-5 Number / Title:
1 / P-8A MULTI-MISSION MARITIME AIRCRAFT (MMA)

			•	FY 2	2020		•
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)
CFE							
CFE - Airframe ⁽⁴⁾	0						0.000
For FY 15 CFE - Airframe	0						-
For FY 16 CFE - Airframe	0						-
For FY 17 CFE - Airframe	0						-
For FY 18 CFE - Airframe	0						-
For FY 19 CFE - Airframe	0						-
For FY20 CFE/GFE - Airframe ⁽⁵⁾	0						-
Total: CFE							0.000
EOQ							
For FY 2016 EOQ/Long Lead	0						-
For FY 2017 EOQ/Long Lead	0						-
For FY 2018 EOQ/Long Lead	0						-
For FY 2019 EOQ/Long Lead	0						-
Total: EOQ							0.000
Total Advance Procurement/Obligation Authority							-

Description:

Advance Procurement will be used to procure long lead items.

Footnotes:

 LI 0193 - P-8A Poseidon
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⁽⁴⁾ The P-8A Multi-mission Maritime Aircraft (MMA) program provides the replacement systems for the aging P-3 aircraft. The Advanced Procurement funds the long lead time items required for production of the aircraft. PLT reflects the production of the aircraft as reflected on P-21 of the APN Regular Procurement budget. Advanced procurement (AP) funding is required in FY 2019 for long lead requirements associated with the procurement of 7 aircraft in FY 2020. The Advance Procurement (AP) funding will be used to procure long lead CFE items such as basic commercial aircraft long lead requirements (33 months); mission/weapons systems components and P-8A unique airframe components (24 months or greater production lead time). All of these long lead items are essential to maintaining the current schedule in support of the US Navy Fleet Martime Patrol and Reconaissance (MPRA) force transition from P-3C to P-8A.

⁽⁵⁾ The FY20 aircraft procurement is a new quantity acquisition requirement and requires fully funded FY19 Advanced Procurement (AP) to support the FY20 requested aircraft. Based on Boeing's production line transition, reduction in P-8A throughput, and the impact on the aircraft manufacturing line and CFE supplier base, \$30M of AP is required per aircraft (an increase from the historical requirement of ~\$20M per aircraft) was required in order to maintain the required P-8A manufacturing line and delivery schedule.

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0195 / F-2D AHE

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 000

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	85	5	6	4	-	4	4	5	5	-	-	114
Gross/Weapon System Cost (\$ in Millions)	12,080.417	987.313	1,174.371	870.612	0.000	870.612	839.757	1,011.019	1,233.669	195.638	-	18,392.796
Less PY Advance Procurement (\$ in Millions)	1,902.888	271.003	102.026	126.128	-	126.128	160.492	209.855	216.565	-	-	2,988.957
Net Procurement (P-1) (\$ in Millions)	10,177.529	716.310	1,072.345	744.484	0.000	744.484	679.265	801.164	1,017.104	195.638	-	15,403.839
Plus CY Advance Procurement (\$ in Millions)	2,173.891	102.026	240.734	190.204	-	190.204	163.164	118.938	-	-	-	2,988.957
Total Obligation Authority (\$ in Millions)	12,351.420	818.336	1,313.079	934.688	0.000	934.688	842.429	920.102	1,017.104	195.638	-	18,392.796
(The following	Resource Sumr	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	10.350	12.497	6.926	-	6.926	3.632	3.395	3.115	3.110	5.999	49.024
Flyaway Unit Cost (\$ in Thousands)	122,862.976	169,930.000	163,641.000	171,025.250	-	171,025.250	171,354.500	176,349.800	200,148.400	-	-	136,612.289
Gross/Weapon System Unit Cost (\$ in Thousands)	142,122.553	197,462.600	195,728.500	217,653.000	-	217,653.000	209,939.250	202,203.800	246,733.800	-	-	161,340.316

Description:

The E-2D Advanced Hawkeye (AHE) is an all-weather, twin engine, carrier-based, Airborne Command, Control and Surveillance aircraft designed to extend task force defense perimeters. The AHE mission is to provide advance warning of approaching enemy surface units and aircraft, to vector interceptors or strike aircraft to attack, and to provide area surveillance, intercept, search and rescue, communications relay, and strike/air traffic control. Key AHE objectives include: improved battle space target detection and situational awareness, especially in the littorals; support of Theater Air Missile Defense operations; and improved Operational Availability.

0195 BLI Prior Year includes E-2C Procurement (Qty 44)

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

0195 / E-2D AHE

Aircraft

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 000

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / E-2D	P-5a, P-21			85 / 12,080.417	5 / 987.313	6 / 1,174.371	4 / 870.612	- / 0.000	4 / 870.612
P-40	Total Gross/Weapon System Cost				85 / 12,080.417	5 / 987.313	6 / 1,174.371	4 / 870.612	- / 0.000	4 / 870.612

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

LI 0195 - E-2D AHE

Navy

FY 2020 funding is requested to procure four E-2D AHE Full Rate Production Lot 8 aircraft and associated support.

This budget request includes funding to support a FY 2019 through FY 2023 Multi-Year Procurement (MYP) contract.

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Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 01 / 1

P-1 Line Item Number / Title:
0195 / E-2D AHE

Date: March 2019

Item Number / Title [DODIC]:
1 / E-2D

ID Code (A=Service Ready, B=Not Service Ready):		ME	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	85	5	6	4	-	4
Gross/Weapon System Cost (\$ in Millions)	12,080.417	987.313	1,174.371	870.612	0.000	870.612
Less PY Advance Procurement (\$ in Millions)	1,902.888	271.003	102.026	126.128	-	126.128
Net Procurement (P-1) (\$ in Millions)	10,177.529	716.310	1,072.345	744.484	0.000	744.484
Plus CY Advance Procurement (\$ in Millions)	2,173.891	102.026	240.734	190.204	-	190.204
Total Obligation Authority (\$ in Millions)	12,351.420	818.336	1,313.079	934.688	0.000	934.688
(The following Resource Summary rows are for information	onal purposes only. The corr	esponding budget requests	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	10.350	12.497	6.926	-	6.926
Gross/Weapon System Unit Cost (\$ in Thousands)	142.122.553	197.462.600	195.728.500	217.653.000	_	217.653.000

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	;		FY 2018			FY 2019		FY	2020 Bas	se	FY	2020 OC	0	FY	2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	'			'		'	'	'			'		'					
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	67,258.376	85	5,716.962	85,901.747	5	429.509	85,348.000	6	512.088	84,802.750	4	339.211	-	-	-	84,802.750	4	339.2
1.1.2) CFE Electronics ^(†)	38,599.847	85	3,280.987	59,203.164	5	296.016	53,403.333	6	320.420	53,062.000	4	212.248	-	-	-	53,062.000	4	212.2
1.1.3) GFE Electronics	4,734.529	85	402.435	5,363.826	5	26.819	5,477.916	6	32.867	6,449.636	4	25.799	-	-	-	6,449.636	4	25.7
1.1.4) Engine/ Engine Accessories	-	-	251.428	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.1.5) Other GFE	-	-	85.157	-	-	15.328	-	-	9.466	-	-	6.437	-	-	-	-	-	6.4
1.1.6) Recurring Flyaway ECO	-	-	218.974	-	-	28.163	2,679.000	6	16.074	2,757.250	4	11.029	-	-	-	2,757.250	4	11.0
Subtotal: Recurring Cost	-	-	9,955.943	-	-	795.835	-	-	890.915	-	-	594.724	-	-	-	-	-	594.7
Non Recurring Cost	,																	
1.2.1) Non-Recurring Cost	-	-	487.410	-	-	53.815	-	-	90.931	-	-	89.377	-	-	-	-	-	89.3
Subtotal: Non Recurring Cost	-	-	487.410	-	-	53.815	-	-	90.931	-	-	89.377	-	-	-	-	-	89.3
ubtotal: Flyaway Cost	-	-	10,443.353	-	-	849.650	-	-	981.846	-	-	684.101	-	-	-	-	-	684.1
Support Cost				'		'	'	'			'		'					
2.1) Airframe PGSE	-	-	48.258	-	-	2.537	-	-	2.108	-	-	2.714	-	-	-	-	-	2.7
2.2) Engine PGSE	-	-	31.288	-	-	4.428	-	-	4.796	-	-	4.999	-	-	-	-	-	4.9
2.3) Avionics PGSE (1)	-	-	450.570	_	-	34.918	_ [_	62.661	-	_	75.559	_	_	_	_	_	75.5

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Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0195 / E-2D AHE	1 / E-2D

ID Code (A=Service Ready, B=Not Service Ready) :

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

MDAP/MAIS Code:

	F	Prior Year	S		FY 2018			FY 2019		FY	/ 2020 Ba	se	F	1 2020 OC	0	F	Y 2020 To	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
2.4) Peculiar Training Equipment	-	-	297.863	-	-	28.294	-	-	46.230	-	-	33.296	-	-	-	-	-	33.296
2.5) Pub/Tech Eq	-	-	102.297	-	-	10.733	-	-	14.993	-	-	14.068	-	-	-	-	-	14.068
2.6) Production Engineering Support	-	-	463.093	-	-	25.857	-	-	25.211	-	-	24.846	-	-	-	-	-	24.846
2.7) Other ILS	-	-	243.695	-	-	30.896	-	-	36.526	-	-	31.029	-	-	-	-	-	31.029
Subtotal: Support Cost	-	-	1,637.064	-	-	137.663	-	-	192.525	-	-	186.511	-	-	-	-	-	186.511
Gross/Weapon System Cost	142,122.553	85	12,080.417	197,462.600	5	987.313	195,728.500	6	1,174.371	217,653.000	4	870.612	-	-	0.000	217,653.000	4	870.612

^(†) indicates the presence of a P-5a

Footnotes:

(1) Avionics PGSE increase in cost from FY19 to FY20 is due to electronic Consolidated Automated Support System (eCASS) Test Program Sets (TPSs) Development, which provides Naval aircraft avionics component maintenance and repair support at Intermediate and Depot maintenance facilities both shore-based and afloat.

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Exhibit P-5a, Procurement History and Planning: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:
1506N / 01 / 1

P-1 Line Item Number / Title:
0195 / E-2D AHE

Item Number / Title [DODIC]:
1 / E-2D

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date		Qty Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2015	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2015	Oct 2017	5	85,177.480	Υ		Nov 2012
1.1.1) Airframe/CFE ^(†)		2016	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2016	Dec 2018	5	87,367.093	Υ		Nov 2012
1.1.1) Airframe/CFE ^(†)		2017	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2017	Dec 2019	6	84,035.738	Υ		Nov 2012
1.1.1) Airframe/CFE ^(†)		2018	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2018	Mar 2021	5	85,901.747	Υ		Nov 2012
1.1.1) Airframe/CFE ^(†)		2019 ⁽²⁾	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2019	Feb 2022	6	85,348.000	Υ		Mar 2017
1.1.1) Airframe/CFE ^(†)		2020	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2020	Apr 2023	4	84,802.750	Υ		Mar 2017
1.1.2) CFE Electronics ^(†)		2015	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2015	Oct 2017	5	60,893.528	Υ		Nov 2012
1.1.2) CFE Electronics ^(†)		2016	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2016	Dec 2018	5	59,195.398	Υ		Nov 2012
1.1.2) CFE Electronics ^(†)		2017	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2017	Dec 2019	6	59,118.291	Υ		Nov 2012
1.1.2) CFE Electronics ^(†)		2018	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2018	Mar 2021	5	59,203.164	Υ		Nov 2012
1.1.2) CFE Electronics ^(†)		2019 ⁽³⁾	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2019	Feb 2022	6	53,403.333	Υ		Mar 2017
1.1.2) CFE Electronics ^(†)		2020	Northrop Grumman Systems / Florida	SS / FPIF	NAVAIR	Mar 2020	Apr 2023	4	53,062.000	Y		Mar 2017

^(†) indicates the presence of a P-21

Footnotes:

⁽²⁾ Planned Mutli-year Procurement (MYP) contract to award March 2019

⁽³⁾ Planned Mutli-year Procurement contract to award March 2019

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P-1 Line #16

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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 01 / 1	0195 / E-2D AHE	1 / E-2D

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MF	R					lni	tial			Reo	rder	
Re #	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	Northrop Grumman Systems Florida	4	6	8	0	0	0	0	7	5	42	47
	2 Northrop Grumman Systems - Florida	4	6	8	0	0	0	0	7	5	42	47

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

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Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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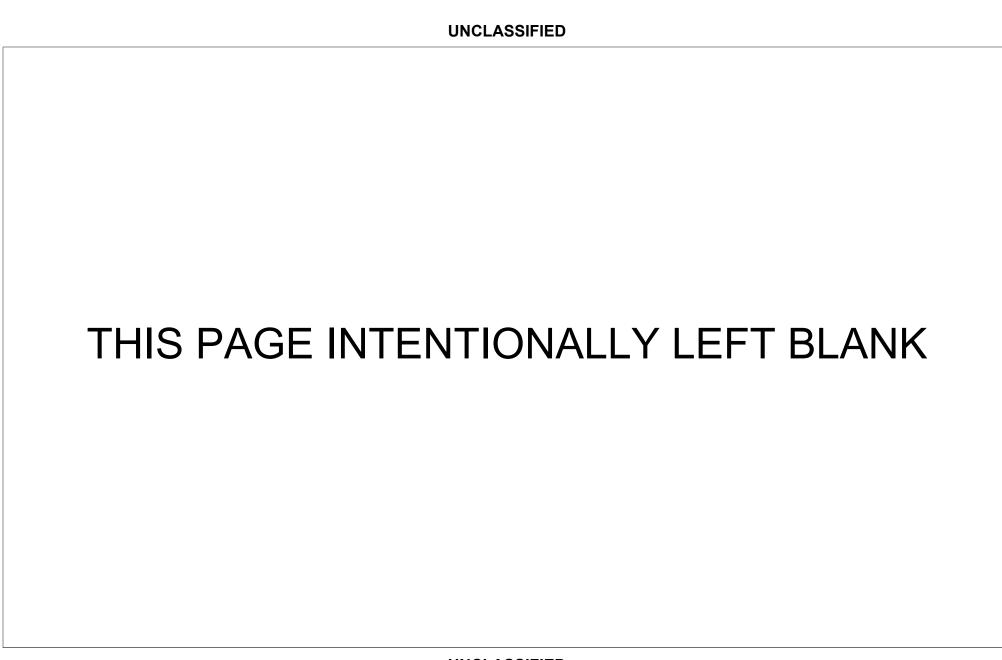


Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

0195 / F-2D AHE

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 000

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Gross/Weapon System Cost (\$ in Millions)	2,173.891	102.026	240.734	190.204	-	190.204	163.164	118.938	-	-	-	2,988.957
Net Procurement (P-1) (\$ in Millions)	2,173.891	102.026	240.734	190.204	-	190.204	163.164	118.938	-	-	-	2,988.957
Total Obligation Authority (\$ in Millions)	2,173.891	102.026	240.734	190.204	-	190.204	163.164	118.938	-	-	-	2,988.957

Description:

The E-2D Advanced Hawkeye (AHE) is an all-weather, twin engine, carrier-based, Airborne Command, Control and Surveillance aircraft designed to extend task force defense perimeters. The AHE mission is to provide advance warning of approaching enemy surface units and aircraft, to vector interceptors or strike aircraft to attack, and to provide area surveillance, intercept, search and rescue, communications relay, and strike/air traffic control. Key AHE objectives include: improved battle space target detection and situational awareness, especially in the littorals; support of Theater Air Missile Defense operations; and improved Operational Availability.

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat

Aircraft

0195 / E-2D AHE

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

P-1 Line Item Number / Title:

Line Item MDAP/MAIS Code: 000

	Exhibits Schedule			Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-10	1 / E-2D			85 / 2,173.891	5 / 102.026	6 / 240.734	4 / 190.204	- / -	4 / 190.204
P-40	Total Gross/Weapon System Cost			85 / 2,173.891	5 / 102.026	6 / 240.734	4 / 190.204	- 1 -	4 / 190.204

^{*}Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2020 Advance Procurement funding is requested for the long-lead requirements associated with the procurement of four E-2D aircraft in FY 2021. Airframe requirements are calculated on a supplier's commitment, reflecting contractor's funding requirements for procurement of long lead parts and materials necessary to protect the delivery schedule. This budget request also includes EOQ funding in FY2020 to support a FY 2021 through FY 2023 Multi-Year Procurement (MYP) contract.

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P-1 Line #17

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Exhibit P-10, Advance Procuren	nent Requirements Analys	is (<i>page 1 - E</i>	Budget Funding Justif	ication): PB 2020 Navy	Date: March 2019	
Appropriation / Budget Activity 1506N / 01 / 1	/ Budget Sub Activity:	P-1 Line It 0195 / E-20	em Number / Title: D AHE		P-5 Number / Title 1 / E-2D	:
First System (2020) Award Date: February 2012	First System (2020) Comp July 2015	letion Date:		Interval Between Sys 0 Months	stems:	
E-2D	Production (Month		Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)
Quantity			85	5	6	4
Cost Elements	When Re		Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)
CFE						
CFE - Airframe		0	761.495	-	-	-
Prior Years EOQ/Long Lead		0	538.598	-	-	-
For FY 2015 EOQ/Long Lead		0	125.500	-	-	-
For FY 2016 EOQ/Long Lead		0	175.177	-	-	-
For FY 2017 EOQ/Long Lead		0	238.086	-	-	-
For FY 2018 EOQ/Long Lead		0	271.003	-	-	-
For FY 2019 EOQ/Long Lead		0	-	102.026	-	-
For FY 2020 EOQ/Long Lead ⁽⁶⁾		0	-	-	126.128	-
For FY 2021 EOQ/Long Lead		0	-	-	38.202	122.290
For FY 2022 EOQ/Long Lead		0	-	-	38.202	33.957
For FY 2023 EOQ/Long Lead		0	-	-	38.202	33.957
Total: CFE			2,109.859	102.026	240.734	190.204
GFE						
Other GFE		0	32.177	-	-	-
JTIDS		0	16.955	-	-	-
Engines		0	14.900	-	-	-
Total: GFE			64.032	-	-	0.000
Total Advance Procurement/Obligation	Authority		2,173.891	102.026	240.734	190.204

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P-1 Line #17

Exhibit P-10, Advance Procurement Requirements Analysis	s (page 2 - Budget Funding Justification): PB 2020 Navy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	P-5 Number / Title:
1506N / 01 / 1	0195 / E-2D AHE	1 / E-2D

				FY 2	020		
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)
CFE							
CFE - Airframe	•	1					-
Prior Years EOQ/Long Lead	•	1					-
For FY 2015 EOQ/Long Lead	•	1					-
For FY 2016 EOQ/Long Lead	,	1					-
For FY 2017 EOQ/Long Lead	,	1					-
For FY 2018 EOQ/Long Lead	•	1					-
For FY 2019 EOQ/Long Lead	•	1					-
For FY 2020 EOQ/Long Lead ⁽⁶⁾		1					-
For FY 2021 EOQ/Long Lead	,	1					122.29
For FY 2022 EOQ/Long Lead	()					33.95
For FY 2023 EOQ/Long Lead	(O					33.95
Total: CFE							190.20
GFE							
Other GFE	,	1					-
JTIDS	•	1					-
Engines	•	1					-
Total: GFE							0.00
Total Advance Procurement/Obligation Authority							190.20

Description:

The Advance Procurement (AP) funding will be used to procure long lead CFE items (14 months or greater production lead time) such as raw materials (inclusive of steel, titanium, aluminum, composites), castings, forgings, bearings, actuators, mission equipment, antenna assemblies, panel assemblies, gearboxes and airframe structural components. E-2D lead times for components have been as high as 42 months. The E-2D program has been actively pursuing lead time reductions and the current longest lead component is 36 months (APY-9 Radar). Some specific material lead items are the ADS-18 antenna assembly (32 months), TARA assembly (20 months), landing gear including forgings (26 months) and empennage assembly including composite core materials and forged torque tubes for the empennage (31 months). All of these long lead items and special milling for "oversized" sheet stock required for the Fuselage skins at the beginning of aircraft assembly (14 months) are essential to maintaining the current schedule in support of the Fleet Forces transition to the E-2D.

Footnotes:

(6) Increase from FY18 to FY19 Advance Procurement: There is no Economic Order Quantity (EOQ) funding associated with FY18. (All other fiscal years of Advance Procurement lines include EOQ.)

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P-1 Line #17

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 02: Airlift Aircraft / BSA 1: Airlift Aircraft

0246 / C-40A

ID Code (A=Service Ready). A Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	12	2	-	-	-	-	-	-	-	-	-	14
Gross/Weapon System Cost (\$ in Millions)	885.878	207.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	1,092.878
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	885.878	207.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	1,092.878
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	885.878	207.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	1,092.878
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget requests	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	11.287	-	-	-	-	-	-	-	-	-	11.287
Flyaway Unit Cost (\$ in Thousands)	69,551.167	94,885.000	-	-	-	-	-	-	-	-	-	73,170.286
Gross/Weapon System Unit Cost (\$ in Thousands)	73,823.167	103,500.000	-	-	-	-	-	-	-	-	-	78,062.714

Description:

The C-40A is the replacement for the C-9B/DC-9 aircraft. The C-40A provides the Navy Reserve and the Marines with a long range aircraft that will carry high priority operational passengers and cargo. The C-40A carries 121 passengers in the all passenger configuration, eight standard DoD cargo pallets in the all cargo configuration, or 3 pallets and 70 passengers in the combination configuration. The base aircraft that can be designated as the C-40A includes the Boeing 737-700 Next Generation Series aircraft with Increased Gross Weight capability. The C-40A is certified for Extended Twin-Engine Operations (ETOPS) for over water operations.

The long term objective for the C-40A program is to replace 17 Navy C-9B/DC-9 aircraft and 2 Marine C-9B aircraft.

Twelve Navy aircraft are reflected in prior year's quantity and cost. An additional five C-40A were previously procured for the Naval Reserves using National Guard & Reserve Equipment (NGRE) funding (FY97-99/qty 4 and FY12/qty 1), these quantities and associated costs are not reflected in the prior year quantity and associated cost. The two USMC aircraft in FY18 satisfies the Program of Record.

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P-1 Line #18

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 02: Airlift Aircraft / BSA 1: Airlift Aircraft

0246 / C-40A

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / C-40A	P-5a, P-21			12 / 885.878	2 / 207.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-40	Total Gross/Weapon System Cost				12 / 885.878	2 / 207.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

Program of Record is complete. No funding is required in FY20.

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P-1 Line #18

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Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:
1506N / 02 / 1

Date: March 2019

Item Number / Title [DODIC]:
1 / C-40A

MDAP/MAIS Code:

_

_

Prior Years FY 2019 **FY 2020 Base FY 2020 OCO** FY 2020 Total **Resource Summary** FY 2018 Procurement Quantity (Units in Each) 12 Gross/Weapon System Cost (\$ in Millions) 885.878 207.000 0.000 0.000 0.000 0.000 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) 885.878 207.000 0.000 0.000 0.000 0.000 Plus CY Advance Procurement (\$ in Millions) Total Obligation Authority (\$ in Millions) 885.878 207.000 0.000 0.000 0.000 0.000 (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) Initial Spares (\$ in Millions) 11.287

73,823.167

103,500.000

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready):

Gross/Weapon System Unit Cost (\$ in Thousands)

	P	rior Years	;		FY 2018			FY 2019		FY	2020 Bas	se	FY	2020 OC	0	FY	2020 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) Airframe /CFE ^(†)	65,664.083	12	787.969	78,464.500	2	156.929	-	-	-	-	-	-	-	-	-	-	-	
1.1.2) CFE Electronics	-	-	0.100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.1.3) GFE Electronics	-	-	0.941	-	-	0.231	-	-	-	-	-	-	-	-	-	-	-	
1.1.6) Other GFE	-	-	6.852	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Recurring Cost	-	-	795.862	-	-	157.160	-	-	-	-	-	-	-	-	-	-	-	
Non Recurring Cost																		
1.2.1) Non-Recur Cost	-	-	38.752	-	-	32.610	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Non Recurring Cost	-	-	38.752	-	-	32.610	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Flyaway Cost	-	-	834.614	-	-	189.770	-	-	-	-	-	-	-	-	-	-	-	
Support Cost																		
2.1) Airframe PGSE	-	-	22.197	-	-	4.407	-	-	-	-	-	-	-	-	-	-	-	
2.5) Pub/Tech Eq	-	-	0.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.6) Prod Eng Spt	-	-	7.965	-	-	5.010	-	-	-	-	-	-	-	-	-	-	-	
2.7) Other ILS	-	-	20.602	-	-	1.700	-	-	-	-	-	-	-	-	-	-	-	
2.8) Misc. Support	-	-	-	-	-	6.113	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Support Cost	-	-	51.264	-	-	17.230	-	-	-	-	-	-	-		-	-	-	
Gross/Weapon System Cost	73,823.167	12	885.878	103,500.000	2	207.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0

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P-1 Line #18

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Exhibit P-5, Cost Analysis: PB 2020 Navy			Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 02 / 1	P-1 Line Item Number / T 0246 / C-40A	itle:	Item Number / Title [DODIC]: 1 / C-40A
ID Code (A=Service Ready, B=Not Service Ready):		MDAP/MAIS Code:	
1506N / 02 / 1			Item Number / Title [DODIC]: 1 / C-40A

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Exhibit P-5a, Procurement History and Planning: PB 2020 N	lavy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 02 / 1	0246 / C-40A	1 / C-40A

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe /CFE ^(†)		2017	Boeing / Seattle, WA	C / FFP	Patuxent River, MD	Dec 2017	Dec 2019	2	75,379.500	Υ		May 2017
1.1.1) Airframe /CFE ^(†)		2018 (1)	Boeing / Seattle, WA	C / FFP	Patuxent River, MD	Dec 2019	Jun 2022	2	78,464.500	Υ	-	May 2018

^(†) indicates the presence of a P-21

Footnotes:

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Navy

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P-1 Line #18

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⁽¹⁾ Original sole source procurement negotiations suspended due to inability to achieve fair and reasonable pricing. Contract award delayed to assess industry RFI responses and implement refined acquisition strategy. Estimated December 2019 award.

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hibit	t P-	21, Pro	ducti	on Sc	hedu	le: PE	3 202	20 Nav	/y														Date	e: Ma	rch 20	019				
-	-		Budge	t Acti	vity /	Budç	get S	ub Ac	ctivity	':				Num	ber /	Title:										Title	[DOI	DIC]:		
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													C	alendar	Year 20	18								Caler	ndar Yea	r 2019				L
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1) Airfra	ame /	CFE																												
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Ex	hibit	P-21, Pr	oduct	ion Sc	hedul	le: PE	3 202	0 Nav	У														Date	: Ma	rch 20)19				
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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 02 / 1	0246 / C-40A	1 / C-40A

		Produc	ction Rates (Each	/ Year)				Procurement Lea	adtime (Months)			
MF	R					Init	tial			Reo	rder	
Re #	f Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	1 Boeing - Seattle, WA			TBD	4	0	24	24	0	0	0	0

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

(2) FY18 QTY 2 C-40A ARE USMC AIRCRAFT.

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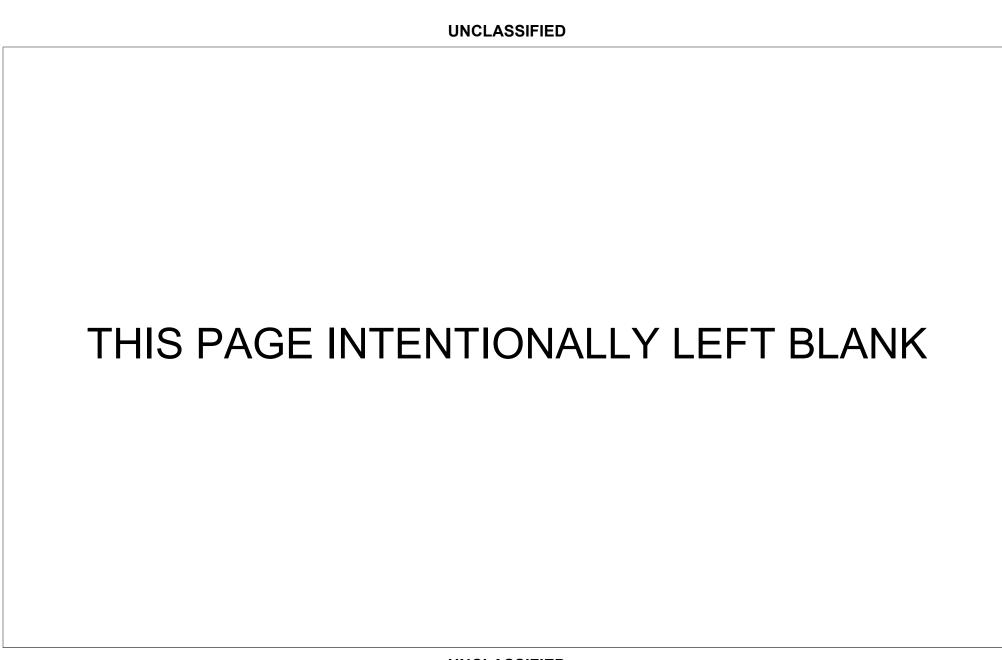


Exhibit P-40, Budget Line Item Justification: PB 2020 Navv Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 03: Trainer Aircraft / BSA 1: Trainer Aircraft | 0344 / Advanced Helicopter Training System

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	32	-	32	31	31	15	-	-	109
Gross/Weapon System Cost (\$ in Millions)	0.000	0.000	0.000	261.160	0.000	261.160	266.000	263.500	130.500	0.000	182.145	1,103.305
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	0.000	0.000	261.160	0.000	261.160	266.000	263.500	130.500	0.000	182.145	1,103.305
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	0.000	0.000	261.160	0.000	261.160	266.000	263.500	130.500	0.000	182.145	1,103.305
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	9.005	-	9.005	-	-	-	-	-	9.005
Flyaway Unit Cost (\$ in Thousands)	-	-	-	6,947.281	-	6,947.281	7,118.871	7,284.774	7,453.667	-	-	8,666.413
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	8,161.250	-	8,161.250	8,580.645	8,500.000	8,700.000	-	-	10,122.064

Description:

The Advanced Helicopter Training System (AHTS) is a system-of-systems that provides the capability to train advanced rotary wing and intermediate tilt-rotor students for designation as Naval Aviators in the Navy, Marine Corps, and Coast Guard. AHTS consists of: 1) the air vehicle, 2) the Ground Based Training System (GBTS) revised curriculum, including flight training devices, computer aided instruction, classroom instruction, and the facilities to permanently house them, and 3) the maintenance and logistics infrastructure necessary to ensure defined aircraft availability rates. The air vehicle will meet all requirements under Federal Aviation Regulations to operate under both visual flight rules (VFR) and instrument flight rules (IFR) within the United States national airspace system. The air vehicle and GBTS will continue to train helicopter familiarization, basic and radio instruments, and basic warfighting skills. Basic warfighting skills include: energy management, night vision devices, terrain flight, formation flight, confined area and pinnacle landings, external load and vertical replenishment operations, search and rescue (SAR) including hoist and shipboard operations.

AHTS addresses capacity and capability gaps for the Chief of Naval Air Training (CNATRA) rotary training pipeline identified in the Naval Aviation Undergraduate Training (C-NAUT) Capabilities Based Assessment (CBA) completed in 2015. The CBA identified a common theme of technological obsolescence and mechanical deficiencies requiring a new acquisition or updates to aircraft and simulators.

This line item funds the initial lot of aircraft to replace the TH-57B/C Training System in 2020. The current plan includes budgeting and procuring a single, commercially available Type/Model/Series (T/M/S), digital cockpit (glass) air vehicle without development, testing, or modification of existing commercial equipment starting in FY2020. This plan will assure continuity of a student naval aviator's training transition from primary training to rotary training to the fleet. The costs and quantities budgeted in this document are based on estimates from the initial responses to multiple requests for information (RFIs) from potential vendors. Although the budget exhibit details funding for 109 aircraft based on current information, the requirement for helicopter and tilt rotor training is 130 aircraft with an anticipated aircraft service life of 25-30 years. The program is currently scheduled to make a source selection in first quarter of FY2020 with initial deliveries of aircraft expected a year after contract award.

This is an FY2020 new start.

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 03: Trainer Aircraft / BSA 1: Trainer Aircraft | 0344 / Advanced Helicopter Training System

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Advanced Helicopter Training System	P-5a, P-21			- / 0.000	- / 0.000	- / 0.000	32 / 261.160	- / 0.000	32 / 261.160
P-40	Total Gross/Weapon System Cost				- / 0.000	- / 0.000	- / 0.000	32 / 261.160	- / 0.000	32 / 261.160

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding

Justification:

The FY 2020 budget request includes the procurement of 32 Advanced Helicopter Training System (AHTS) aircraft and associated support costs. The AHTS is a FY 2020 New Start.

The AHTS is the replacement to the TH-57B/C Training System. The aging 35+ year old TH-57B/C Training System faces obsolescence, training deficiencies, increasing maintenance issues, sustainment costs, and safety of flight concerns. Rotary training represents Chief of Naval Air Training (CNATRA) highest demand pipeline and is the only CNATRA platform remaining with analog cockpit technology. The Navy completed a Capability Based Assessment for Naval Aviation Undergraduate Training (C-NAUT) that identified a significant number of capability gaps within rotary training, significant reliability and safety of flight deficiencies, as well as an inability to meet pilot production requirements. Additionally, operations and support costs for the legacy TH-57 Aircraft Conditional Inspection (ACI), required every five years. have increased from \$80K per aircraft ten years ago to \$694K per aircraft today. A commercially available air vehicle will be the right solution to meet the needs of the Navy quickly, efficiently, and with the most economical intent. Market research shows that this plan is executable within four years with ample amount of aircraft to transition to a more modern solution that better prepares pilots for fleet integration. This budget ensures a replacement training helicopter is delivered to the fleet as quickly as possible.

Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:
1506N / 03 / 1

P-1 Line Item Number / Title:
0344 / Advanced Helicopter Training System

Date: March 2019

Item Number / Title [DODIC]:
1 / Advanced Helicopter Training System

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·	MI	DAP/MAIS Code:	·		
Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
-	-	-	32	-	32
0.000	0.000	0.000	261.160	0.000	261.160
-	-	-	-	-	-
0.000	0.000	0.000	261.160	0.000	261.160
-	-	-	-	-	-
0.000	0.000	0.000	261.160	0.000	261.160
onal purposes only. The corr	esponding budget request	s are documented elsewhe	re.)		
-	-	-	9.005	-	9.005
-	-	-	8,161.250	-	8,161.250
	Prior Years - 0.000 - 0.000 - 0.000	Prior Years FY 2018		MDAP/MAIS Code: Prior Years FY 2018 FY 2019 FY 2020 Base	MDAP/MAIS Code: Prior Years FY 2018 FY 2019 FY 2020 Base FY 2020 OCO - - - 32 - 0.000 0.000 0.000 261.160 0.000 - - - - - - 0.000 0.000 0.000 261.160 0.000 - - - - - 0.000 0.000 0.000 261.160 0.000

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	3		FY 2018			FY 2019		FY	' 2020 Bas	e	F	/ 2020 OC	0	F۱	/ 2020 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	'			'			'			'	'					·	'	
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	-	-	-	-	-	-	-	-	-	6,947.274	32	222.313	-	-	-	6,947.274	32	222.313
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	222.313	-	-	-	-	-	222.313
Subtotal: Flyaway Cost	-	-	-	-	-	-	-	-	-	-	-	222.313	-	-	-	-	-	222.313
Support Cost																		
2.1) Airframe PGSE	-	-	-	-	-	-	-	-	-	-	-	0.108	-	-	-	-	-	0.108
2.2) Engine PGSE	-	-	-	-	-	-	- 1	-	-	-	-	0.322	-	-	-	-	-	0.322
2.3) Avionics PGSE	-	-	-	-	-	-	-	-	-	-	-	0.346	-	-	-	-	-	0.346
2.4) Pec Trng Eq	-	-	-	-	-	-	-	-	-	-	-	2.730	-	-	-	-	-	2.730
2.5) Pub/Tech Eq	-	-	-	-	-	-	-	-	-	-	-	2.300	-	-	-	-	-	2.300
2.6) Prod Eng Supt	-	-	-	-	-	-	- 1	-	-	-	-	2.677	-	-	-	-	-	2.677
2.7) Other ILS	-	-	-	-	-	-	- 1	-	-	-	-	30.364	-	-	-	-	-	30.364
Subtotal: Support Cost	-	-	-	-	-	-	-	-	-	-	-	38.847	-	-	-	-	-	38.847
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	0.000	8,161.250	32	261.160	-	-	0.000	8,161.250	32	261.160

Remarks:

[Support Cost] Establishment of cost element is for contractor and government Systems Engineering Program Management (SEPM). Establishment of Integrated Logistics Support (ILS) is for government logistics support.

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^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2020 N	lavy		Date: March 2019
	P-1 Line Item Number / Title:		Item Number / Title [DODIC]:
1506N / 03 / 1	0344 / Advanced Helicopter Training S	System	1 / Advanced Helicopter Training System
0	Method/Type	Date	Specs Date

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2020	TBD / TBD	C/FFP	PAXR	Nov 2019	Nov 2020	32	6,947.274	Y		

^(†) indicates the presence of a P-21

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			Cost Elements (Units in Each)										ear 2020											Fiscal Ye	ar 2021						В
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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 03 / 1	0344 / Advanced Helicopter Training System	1 / Advanced Helicopter Training System

		Produ	ction Rates (Each	/ Year)				Procurement Lea	adtime (Months)			
MF	-R					Init	tial			Reo	rder	
Re #		MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	1 TBD - TBD	12	24	36	0	0	12	12	0	0	0	0

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

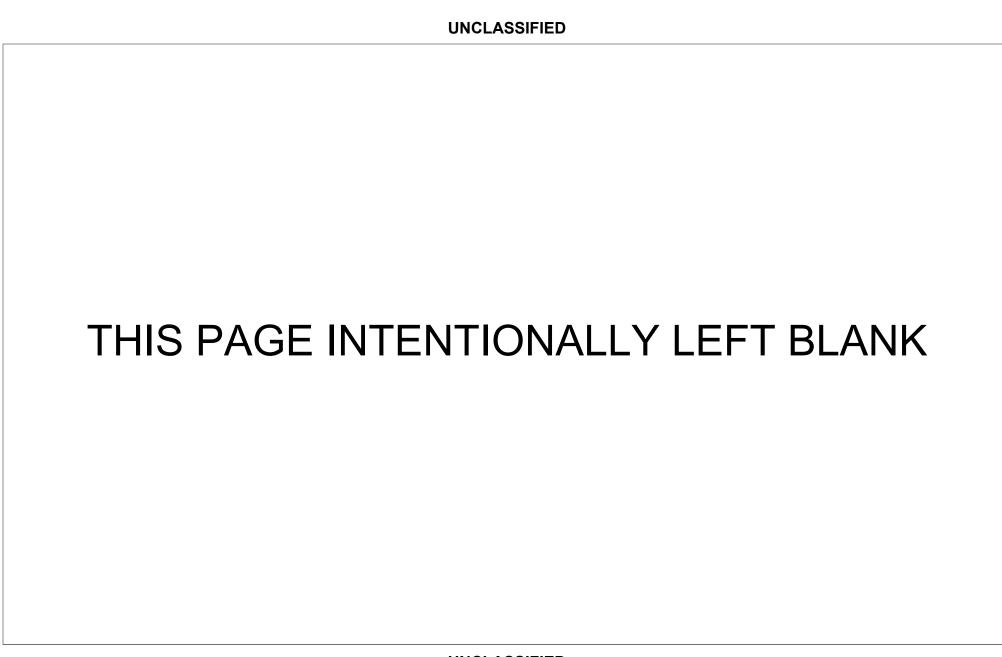


Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0416 / KC-130J

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 000

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	57	6	2	3	-	3	5	5	5	3	25	111
Gross/Weapon System Cost (\$ in Millions)	4,149.218	501.125	175.930	266.853	0.000	266.853	467.366	497.447	512.963	345.830	3,604.269	10,521.001
Less PY Advance Procurement (\$ in Millions)	292.747	28.848	25.497	26.013	-	26.013	86.061	91.022	100.291	42.078	-	692.557
Net Procurement (P-1) (\$ in Millions)	3,856.471	472.277	150.433	240.840	0.000	240.840	381.305	406.425	412.672	303.752	3,604.269	9,828.444
Plus CY Advance Procurement (\$ in Millions)	321.595	25.497	102.013	66.061	-	66.061	67.022	68.291	42.078	-	-	692.557
Total Obligation Authority (\$ in Millions)	4,178.066	497.774	252.446	306.901	0.000	306.901	448.327	474.716	454.750	303.752	3,604.269	10,521.001
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget requests	are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	1.863	1.196	2.074	-	2.074	0.080	-	-	-	-	5.213
Flyaway Unit Cost (\$ in Thousands)	64,271.684	81,210.667	82,841.500	88,613.000	-	88,613.000	92,152.600	94,121.600	96,497.800	113,303.000	133,053.840	87,048.532
Gross/Weapon System Unit Cost (\$ in Thousands)	72,793.298	83,520.833	87,965.000	88,951.000	-	88,951.000	93,473.200	99,489.400	102,592.600	115,276.667	144,170.760	94,783.793

Description:

The KC-130J aircraft is an all metal, high-wing, long-range, land-based monoplane. It is designed for cargo, tanker and troop carrier operations. For tanker operations, the aircrew will consist of a pilot, copilot, augmented crew member and two air refueling observers. Features include wing mounted refueling pods, an internal cargo ramp and door, crew and cargo compartment pressurization, ground and inflight refueling, thermal deicing systems and a Heads-Up Display (HUD). It is designed to take off and land on unimproved runways. The KC-130J aircraft is powered by four Allison AE 2100D3 Turbo-Prop Engines with four six-bladed composite propellers. The cockpit includes state-of-the-art electronics with Liquid Crystal Display (LCD) instrumentation. The improved power performance of the KC-130J provides 40 percent greater range, 25 percent higher cruise ceiling, 46 percent decrease in time-to-climb, 21 percent increase in maximum speed and 41 percent decrease in maximum effort take-off run over the existing KC-130F/R/T models.

The mission of the KC-130J is to provide tactical in-flight refueling and assault support transport. As a tactical transport, it is capable of conventional or aerial delivery of personnel or cargo. The aircraft is capable of carrying 92 combat troops or 64 paratroopers with equipment or 64 litters when configured as an ambulance. The aircraft is equipped for in-flight refueling to service two aircraft simultaneously and has a removable 3,600 gallon (13,627 liter) fuel tank in the cargo compartment. The KC-130J has the capability to refuel low-speed helicopters, tilt-rotor aircraft and high-speed jet aircraft. Aerial refueling of helicopters is normally conducted at 6,000 feet or below, at an airspeed of 115 KTS TAS and requires a ground change of the refueling basket.

- 1. Initial spares Prior Year total = 265.481M; Initial spares TC = 198.758M; Total Initial Spares = 469.452M
- 2 FY19 USNR \$12 0M FOO required to secure MYPIII pricing for all DoD aircraft procurements.

Seconda	ry Distribution	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	12.000	-	-	-	-	-	-	-
MCR	Quantity	6	2	3	-	3	5	5	5	3
	Total Obligation Authority	497.774	240.446	306.901	-	306.901	448.327	474.716	454.750	303.752
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	497.774	252.446	306.901	-	306.901	448.327	474.716	454.750	303.752

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LI 0416 - KC-130J Navv

P-1 Line #20

Volume 1 - 159

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0416 / KC-130J

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 000

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / KC-130J	P-5a, P-21			57 / 4,149.218	6 / 501.125	2 / 175.930	3 / 266.853	- / 0.000	3 / 266.853
P-40	Total Gross/Weapon System Cost				57 / 4,149.218	6 / 501.125	2 / 175.930	3 / 266.853	- / 0.000	3 / 266.853

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2020 budget request procures KC-130J aircraft, associated support equipment for the USMCR Squadrons, and removable 3,600 gallon fuel tanks to account for the inventory increase. In addition, the FY2020 Budget Request reflects an increase in the USMC Inventory Objective from 79 aircraft to 86 aircraft for a total program of record of 111 aircraft.

Budget request supports FY19-23 Multi-Year Procurement (MYP) with joint participation with the USAF (Lead service).

LI 0416 - KC-130J

Navy

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Page 2 of 10

P-1 Line #20

Volume 1 - 160

Date: March 2019 Exhibit P-5, Cost Analysis: PB 2020 Navy Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 1506N / 04 / 1 0416 / KC-130J 1 / KC-130J

ID Code (A=Service Ready, B=Not Service Ready):		М	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	57	6	2	3	-	3
Gross/Weapon System Cost (\$ in Millions)	4,149.218	501.125	175.930	266.853	0.000	266.853
Less PY Advance Procurement (\$ in Millions)	292.747	28.848	25.497	26.013	-	26.013
Net Procurement (P-1) (\$ in Millions)	3,856.471	472.277	150.433	240.840	0.000	240.840
Plus CY Advance Procurement (\$ in Millions)	321.595	25.497	102.013	66.061	-	66.061
Total Obligation Authority (\$ in Millions)	4,178.066	497.774	252.446	306.901	0.000	306.901
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	1.863	1.196	2.074	-	2.074
Gross/Weapon System Unit Cost (\$ in Thousands)	72,793.298	83,520.833	87,965.000	88,951.000	-	88,951.000

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	Pi	rior Years	;		FY 2018			FY 2019		FY	' 2020 Bas	se	FY	′ 2020 OC	:0	FY	' 2020 Tot	:al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost					,					,								
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	61,515.298	57	3,506.372	75,334.167	6	452.005	77,491.000	2	154.982	85,352.667	3	256.058	-	-	-	85,352.667	3	256.0
1.1.2) GFE Electronics	-	-	76.662	-	-	13.263	-	-	4.509	-	-	6.899	-	-	-	-	-	6.8
1.1.3) Other GFE	-	-	20.730	-	-	5.540	-	-	1.884	-	-	2.882	-	-	-	-	-	2.8
Subtotal: Recurring Cost	-	-	3,603.764	-	-	470.808	-	-	161.375	-	-	265.839	-	-	-	-	-	265.8
Non Recurring Cost																		
1.2.1) Non-Recur Cost (2)	-	-	59.722	-	-	16.456	-	-	4.308	-	-	-	-	-	-	-	-	
Subtotal: Non Recurring Cost	-	-	59.722	-	-	16.456	-	-	4.308	-	-	-	-	-	-	-	-	
Subtotal: Flyaway Cost	-	-	3,663.486	-	-	487.264	-	-	165.683	-	-	265.839	-	-	-	-	-	265.8
Support Cost																		
2.1) Airframe PGSE	-	-	5.323	-	-	0.138	-	-	0.665	-	-	-	-	-	-	-	-	
2.2) Engine PGSE	-	-	3.700	-	-	0.626	-	-	2.879	-	-	-	-	-	-	-	-	
2.3) Avionics PGSE	-	-	5.426	-	-	0.297	-	-	1.341	-	-	-	-	-	-	-	-	
2.4) Pec Trng Eq (3)	-	-	228.849	-	-	7.543	-	-	-	-	-	-	-	-	-	-	-	
2.5) Pub/Tech Eq	-	-	3.912	-	-	0.069	-	-	0.070	-	-	-	-	-	-	-	-	
2.6) Prod Eng Supt	-	-	87.777	-	-	2.405	-	-	2.453	-	-	0.507	-	-	-	- 1	-	0.5
2.7) Other ILS	-	-	132.495	-	-	2.783	-	-	2.839	-	-	0.507	-	-	-	- 1	-	0.5

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LI 0416 - KC-130J Page 3 of 10 Navy P-1 Line #20

Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0416 / KC-130J	1 / KC-130J

ID Code (A=Service Ready, B=Not Service Ready):

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

MDAP/MAIS Code:

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	F	Prior Years	s		FY 2018			FY 2019		FY	/ 2020 Ba	se	F	Y 2020 OC	o	F	Y 2020 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
2.8) Miscellaneous Support	-	-	18.250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support Cost	-	-	485.732	-	-	13.861	-	-	10.247	-	-	1.014	-	-	-	-	-	1.014
Gross/Weapon System Cost	72,793.298	57	4,149.218	83,520.833	6	501.125	87,965.000	2	175.930	88,951.000	3	266.853	-	-	0.000	88,951.000	3	266.853

^(†) indicates the presence of a P-5a

Footnotes:

⁽¹⁾ FY19 unit cost is reflective of the Congressional reduction. FY19 - FY23 CFE Pricing predicated on procuring aircraft under a Multi Year Procurement Three (MYPIII). Unit cost growth due to the incorporation of Department of the Navy Large Aircraft Infrared Counter Measures (DoN LAIRCM) and Block Upgrade on the production line aircraft to increase flight line availability upon aircraft delivery by reducing the number of aircraft unavailable due to required modifications post production.

⁽²⁾ Non-recurring costs include engineering for diminishing manufacturing sources and material shortages.

⁽³⁾ Training Equipment procurements support standup of VMGR-452. Costs vary due to type of training equipment being procured (Cockpit Procedures Trainer, Observer Trainer and Fuselage Trainer).

Exhibit P-5a, Procurement History and Planning: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 04 / 1

P-1 Line Item Number / Title:
0416 / KC-130J

Date: March 2019

Item Number / Title [DODIC]:
1 / KC-130J

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2015	LMAS ⁽⁴⁾ / Marrietta, GA	SS / FPIF	USAF Wright Patterson Ohio	Dec 2015	Apr 2017	1	65,528.000	Υ		
1.1.1) Airframe/CFE ^(†)		2016	LMAS ⁽⁴⁾ / Marrietta, GA	SS / FPIF	USAF Wright Patterson Ohio	Mar 2016	May 2018	2	69,355.000	Υ		
1.1.1) Airframe/CFE ^(†)		2017	LMAS ⁽⁴⁾ / Marrietta, GA	SS / FPIF	USAF Wright Patterson Ohio	Dec 2016	Apr 2019	2	70,481.500	Υ		
1.1.1) Airframe/CFE ^(†)		2018	LMAS ⁽⁴⁾ / Marrietta, GA	SS / FPIF	USAF Wright Patterson Ohio	Dec 2017	Sep 2019	6	75,334.167	Υ		
1.1.1) Airframe/CFE ^(†)		2019 ⁽⁵⁾	LMAS ⁽⁴⁾ / Marrietta, GA	SS / FFP	USAF Wright Patterson Ohio	Mar 2020	Feb 2022	2	77,491.000	Υ		Jan 2018
1.1.1) Airframe/CFE ^(†)		2020 (6)	LMAS ⁽⁴⁾ / Marrietta, GA	SS / FFP	USAF Wright Patterson Ohio	Mar 2020	Apr 2022	3	85,352.667	Y		

^(†) indicates the presence of a P-21

Footnotes:

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Navy

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P-1 Line #20

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⁽⁴⁾ Manufacturer Production Lead Time does not reflect additional 12 - 24 month lead time required for long lead items procured through the Advance Procurement contract. MSR drops from 16 to 12 per year starting in FY19.

⁽⁵⁾ FY19 - FY23 CFE Pricing predicated on procuring Aircraft under a Multi Year Procurement (MYP) and incorporation of Large Aircraft Infrared Counter Measures (LAIRCM) and Block Upgrade 8.1. FY19 contract award delayed to March 2020 in accordance with definitization of MYPIII pricing; No change in aircraft delivery due to EOQ and AP funded on time.

⁽⁶⁾ FY20 will award concurrently with FY19-FY23 MYPIII contract.

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.1.1) Airfram	e/CFE ⁽¹⁾																												
rior	Years D	eliveries: 52																												
1	2015	NAVY	1	0	1			Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1						
1	2016	NAVY	2	0	2						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	2017	NAVY	2	0	2															Α -	-	-	-	-	-	-	-	-	-	
1	2018	NAVY	6 ⁽⁷⁾	0	6																									
1	2019	NAVY	2	0	2																									
1	2020	NAVY	3	0	3																									
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20	017 1	NAVY	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1		
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1)6N I I I I I I I I I I	M F R FY 11) Airframe/r Years Del 1 2015 1 2016 1 2017 1 2018 1 2019	D6N / 04 / 1 Cost EI (Units ii F F SERVICE 1) Airframe/CFE (1) r Years Deliveries: 52 1 2015 NAVY 1 2016 NAVY 1 2017 NAVY 1 2018 NAVY	Cost Elements (Units in Each) Cost Elements (Units in Each	Cost Elements (Units in Each)	Cost Elements (Units in Each) ACCEPT BAL TO 1 DUE	Cost Elements (Units in Each)	Cost Elements (Units in Each) ACCEPT BAL TO 1 DUE O N N AS OF C O O TO 1 DUE TO 1 Cost Elements (Units in Each) ACCEPT BAL DUE O N D DUE O N D DUE O D DUE O D D D D D D D D D	Cost Elements (Units in Each)	Cost Elements (Units in Each) ACCEPT PRIOR TO 1 DUE O N D J F	Cost Elements	Cost Elements	Cost Elements	Cost Elements	Cost Elements (Units in Each) Calendar Year 2018 Fiscal Year 2018 Mark	Cost Elements	Cost Elements	Cost Elements	Cost Elements	Cost Elements (Units in Each) ACCEPT PRIOR TOUL Cost Elements	O416 / KC-130J Cost Elements (Units in Each)	O416 / KC-130J	O416 / KC-130J	O416 / KC-130J O416	O416 / KC-130J	Odd KC-130J TKC-130J TKC-	O416 / KC-130J	O416 / KC-130J		

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1.1	I.1) A	irframe	e/CFE ⁽¹⁾		'																			'		<u>'</u>		'	'		
Pri	ior Ye	ears De	liveries: 52																												
	1	2015	NAVY	1	1	0																									
	1	2016	NAVY	2	2	0																								l	
	1	2017	NAVY	2	2	0				1																	1			l	
	1	2018	NAVY	6 ⁽⁷⁾	1	5	-	1	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	1	-	1					
	1	2019	NAVY	2	0	2						Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1	2020	NAVY	3	0	3		,		,	,	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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Exh	ibit	P-21, Pr	oducti	on Sc	hedul	e: PB	2020	0 Nav	У														Date	: Mar	ch 20	19				
5 0	rop i 6N /	riation / 04 / 1	Budge	et Acti	vity /	Budg	et Su	ıb Ac	tivity	:		Line 6 / KC			ber /	Title:							Item 1 / K	Num C-130	iber/	Title	[DOD	DIC]:		
		Cost E (Units	lements in Each)								Fiscal Ye	ear 2022											Fiscal Ye	ear 2023						
M F R		SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021		O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	Year 202 J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	dar Year M A Y	J U N	J U L	A U G	S E P	
.1.1)	Airfram	ne/CFE (1)																												
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1	2015	NAVY	1	1																										
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1	2017	NAVY	2	2	0																									\perp
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_		NAVY	2			-	-	-	-	1	1			,																L
1	2020	NAVY	3	0	3	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	1							\perp
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N J	U U	U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N J	T N J	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0416 / KC-130J	1 / KC-130J

		Produc	tion Rates (Each	/ Year)				Procurement Lea	adtime (Months)			
MFR						Ir	itial			Red	rder	
Ref #	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	LMAS (4) - Marrietta, GA	12	24	36	0	(36	42	0	6	23	29

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

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⁽⁴⁾ Manufacturer Production Lead Time does not reflect additional 12 - 24 month lead time required for long lead items procured through the Advance Procurement contract. MSR drops from 16 to 12 per year starting in FY19.

⁽⁷⁾ FY18 QTY 2 baseline aircraft procured via MYP contract with PLT of 24 months; QTY 4 Congressional Add aircraft procured via FYOC contract (no Advance Procurement) with PLT of 36 months. Contractual delivery dates for Congressional Add aircraft #60 is Dec 2021; aircraft 61 and 62 March 2022; aircraft 63 September 2022.

Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0416 / KC-130J

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 000

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Gross/Weapon System Cost (\$ in Millions)	321.595	25.497	102.013	66.061	-	66.061	67.022	68.291	42.078	-	-	692.557
Net Procurement (P-1) (\$ in Millions)	321.595	25.497	102.013	66.061	-	66.061	67.022	68.291	42.078	-	-	692.557
Total Obligation Authority (\$ in Millions)	321.595	25.497	102.013	66.061	-	66.061	67.022	68.291	42.078	-	-	692.557

Description:

The KC-130J aircraft is an all metal, high-wing, long-range, land-based monoplane. It is designed for cargo, tanker and troop carrier operations. For tanker operations, the aircrew will consist of a pilot, co-pilot, augmented crew member and two air refueling observers. Features include wing mounted refueling pods, an internal cargo ramp and door, crew and cargo compartment pressurization, ground and in-flight refueling, thermal deicing systems and a Heads-Up Display (HUD). It is designed to take off and land on unimproved runways. The KC-130J is powered by four Allison AE 2100D3 Turbo-Prop Engines with four six-bladed composite propellers. The cockpit includes state-of-the-art electronis with Liquid Crystal Display (LCD) instrumentation. The improved power performance of the KC-130J provides 40 percent greater range, 25 percent higher cruise ceiling, 46 percent decrease in time-to-climb, 21 percent increase in maximum spreed and 41 percent decrease in maximum effort take-off run over the existing KC-130F/R/T models

The mission of the KC-130J is to provide tactical in-flight refueling and assault support transport. As a tactical transport, it is capable of conventional or aerial delivery of personnel or cargo. The aircraft is capable of carrying 92 combat troops or 64 paratroopers with equipment or 64 litters when configured as an ambulance. The aircraft is equipped for in-flight refueling to service two aircraft simultaneously and has a removable 3,600 gallon (13,627 liter) fuel tank in the cargo compartment.

The KC-130J has the capability to refuel low-speed helicopters and high-speed jet aircraft. Aerial refueling of helicopters is normally conducted at 6,000 feet or below, at an airspeed of 115 KTS TAS and requires a ground change of the refueling basket.

Note:

FY19 USNR \$12.0M EOQ required to secure MYPIII pricing for all DoD aircraft procurements.

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Navy

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0416 / KC-130J

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 000

	Exhibits Schedule			Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-10	1 / KC-130J			57 / 321.595	6 / 25.497	2 / 102.013	3 / 66.061	- / -	3 / 66.061
P-40	Total Gross/Weapon System Cost			57 / 321.595	6 / 25.497	2 / 102.013	3 / 66.061	- 1 -	3 / 66.061

^{*}Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY20 Advance Procurement request covers requirements for Airframe Contractor Furnished Equipment (CFE) and Long Lead Government Furnished Equipment (GFE) to support procurement of 5 KC-130J Aircraft for USMC Squadrons under Program Element 0502504M in FY21.

Budget request supports FY19-FY23 Multi-Year Procurement Three (MYPIII) with joint participation with the USAF (Lead service).

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P-1 Line #21

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Exhibit P-10, Advance Procurer	nent Requirements Analys	sis (page 1 - L	Budget Funding Justific	cation): PB 2020 Navy	Date: March 2019					
Appropriation / Budget Activity 1506N / 04 / 1	/ Budget Sub Activity:	P-1 Line It 0416 / KC-	em Number / Title: 130J		P-5 Number / Title 1 / KC-130J	9 :				
First System (2020) Award Date: January 2013	First System (2020) Comp January 2013	letion Date:		Interval Between System 0 Months	en Systems:					
KC-130J	Production (Mont		Prior Years (Each)	FY 2018 (Each)	FY 2019 (Each)	FY 2020 (Each)				
Quantity			57	6	2	3				
Cost Elements	When Re		Prior Years (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)				
CFE										
CFE - Airframe ⁽⁷⁾		0	247.199	-	-	-				
Prior Year EOQ/Long Lead		0	20.000	-	-	-				
For FY 2018 EOQ/Long Lead		0	20.312	-	-	-				
For FY 2019 EOQ/Long Lead		0	-	20.875	-	-				
For FY 2020 EOQ/Long Lead		0	-	-	21.303	-				
For FY 2021 EOQ/Long Lead		0	-	-	20.000	54.113				
For FY 2022 EOQ/Long Lead		0	-	-	24.000	-				
For FY 2023 EOQ/Long Lead		0	-	-	32.000	-				
Total: CFE			287.511	20.875	97.303	54.113				
GFE										
GFE Electronics		0	31.212	4.324	4.406	11.174				
GFE Other		0	2.872	0.298	0.304	0.774				
Total: GFE			34.084	4.622	4.710	11.948				
Total Advance Procurement/Obligation	Authority		321.595	25.497	102.013	66.061				

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Exhibit P-10, Advance Procurement Requirements Analysis	(page 2 - Budget Funding Justification): PB 2020 Navy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	P-5 Number / Title:
1506N / 04 / 1	1 / KC-130J	

				FY 2	020	•	
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)
CFE							
CFE - Airframe ⁽⁷⁾	0						-
Prior Year EOQ/Long Lead	0)					-
For FY 2018 EOQ/Long Lead	0)					-
For FY 2019 EOQ/Long Lead	0)					-
For FY 2020 EOQ/Long Lead	0)					-
For FY 2021 EOQ/Long Lead	0)					54.113
For FY 2022 EOQ/Long Lead	0)					-
For FY 2023 EOQ/Long Lead	0)					-
Total: CFE							54.113
GFE	,						
GFE Electronics	0)					11.174
GFE Other	0)					0.774
Total: GFE							11.948
Total Advance Procurement/Obligation Authority							66.061

Description:

The Advance Procurement (AP) funding will be used to procure long lead GFE and CFE items. Material long lead items are CFE (Airframe) (12 months), and GFE: SATCOM, AN/ARC210 (12 months), External Tank Reticulated Foam (12 months), TACTERM, ANDVJ (12 months), AN/AAR-47 Missile Approach Warning System (MAWS) (15 months), AN/ALR-56M Radar Warning Receivers (18 months), Wing Reticulated Foam (15 months), KY-75 (16 months), AN/PRC 149 Radio Set (24 months). All of these long lead items are essential to maintaining the KC-130J delivery schedule.

Footnotes:

(7) This budget request supports a FY19-FY23 Multi-Year Procurement (MYP) contract.

LI 0416 - KC-130J
Navy

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P-1 Line #21

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0417 / F-5

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Date: March 2019

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	22	-	22	-	-	-	-	-	22
Gross/Weapon System Cost (\$ in Millions)	0.000	0.000	0.000	39.676	0.000	39.676	0.000	0.000	0.000	0.000	-	39.676
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	0.000	0.000	39.676	0.000	39.676	0.000	0.000	0.000	0.000	-	39.676
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	0.000	0.000	39.676	0.000	39.676	0.000	0.000	0.000	0.000	-	39.676
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget requests	are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	1,803.455	-	1,803.455	-	-	-	-	-	1,803.455
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	1,803.455	-	1,803.455	-	-	-	-	-	1,803.455

Description:

The F-5N is a single seat, dual engine supersonic land based fighter. It is designed to a service life of 9000 flight hours. The aircraft is powered by dual J85 21C engines. The mission of the F-5N is to provide air-to-air training for strike fighter and electronic warfare advanced readiness programs, large force exercise, unit-level training and fleet replacement squadron training. As a supersonic aircraft, it is capable of multi-threat environment, bringing virtually every potential adversary our Navy and Marine Corps might face. The mission cannot be fulfilled through non-material alternatives. This is a new start program.

	·			FY 2020	FY 2020	FY 2020				
Seconda	ry Distribution	FY 2018	FY 2019	Base	осо	Total	FY 2021	FY 2022	FY 2023	FY 2024
Navy	Quantity	-	-	11	-	11	-	-	-	-
	Total Obligation Authority	-	-	19.800	-	19.800	-	-	-	-
NR	Quantity	-	-	11	-	11	-	-	-	-
	Total Obligation Authority	-	-	19.876	-	19.876	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	-	39.676	-	39.676	-	-	-	-

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Navy

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0417 / F-5

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / F-5	P-5a, P-21			- / 0.000	- / 0.000	- / 0.000	22 / 39.676	- / 0.000	22 / 39.676
P-40	Total Gross/Weapon System Cost				- / 0.000	- / 0.000	- / 0.000	22 / 39.676	- / 0.000	22 / 39.676

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Justification:

Funds are requested in FY 2020 for the procurement of 22 F-5E/F Adversary aircraft from the government of Switzerland to provide additional Adversary capacity for the USN and USMC. This is a new start program.

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Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 04 / 1

P-1 Line Item Number / Title:
0417 / F-5

Date: March 2019

Item Number / Title [DODIC]:
1 / F-5

ID Code (A=Service Ready, B=Not Service Ready):		MI	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	-	-	-	22	-	22
Gross/Weapon System Cost (\$ in Millions)	0.000	0.000	0.000	39.676	0.000	39.676
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	0.000	0.000	39.676	0.000	39.676
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	0.000	0.000	39.676	0.000	39.676
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	1,803.455	-	1,803.455

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

140tc. Gubtotais or Totais i										_								
	P	rior Years	8	FY 2018				FY 2019		FY	2020 Bas	se .	F	1 2020 OC	0	F	/ 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Non Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	-	-	-	-	-	-	-	-	-	1,803.455	22	39.676	-	-	-	1,803.455	22	39.676
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	39.676	-	=	-	-	=	39.676
Subtotal: Flyaway Cost	-	-	-	-	-	-	-	-	-	-	-	39.676	-	-	-	-	-	39.676
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	0.000	1,803.455	22	39.676	-	-	0.000	1,803.455	22	39.676

^(†) indicates the presence of a P-5a

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P-1 Line #22

Exhibit P-5a, Procurement History and Planning: PB 2020 N	Navy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0417 / F-5	1 / F-5

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2020	Swiss Government / Switzerland	SS / FFP	NAVAIR	Feb 2020	Jan 2021	22	1,803.455	Y		

^(†) indicates the presence of a P-21

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Ext	nib	it P	-21, Pro	oduct	ion Sc	hedu	le: PE	3 202	0 Nav	'y														Dat	e: Ma	rch 20	019				
		-	ation / 04 / 1	Budg	et Acti	vity /	Budç	get Sı	ıb Ac	tivity	:		Line 7		Num	ber /	Title:							Iten 1 / F		nber /	Title	[DOI)IC]:		
				lements in Each)		,						Fiscal Y	ear 2020											Fiscal \	ear 2021						В
					ACCEPT			_						C	alendar	Year 202	20								Cale	ndar Yea	r 2021				Î
O F C F O #	₹	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	n n	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	A N C E
1.1.1	I) Airl	frame	/CFE		,																	· · · · ·									
1	1 20	020	NAVY	22	2 0	22					Α -	-	-	-	-	-	-	-	-	-	-	22									0
		·				-	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0417 / F-5	1 / F-5

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFF						lni	tial			Reo	rder	
Ref		MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Swiss Government - Switzerland			TBD	0	5	11	16	0	0	0	0

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

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Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0442 / MQ-4 TRITON

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0305220N, 0305421N

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 373

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	6	3	3	2	-	2	2	3	5	5	36	65
Gross/Weapon System Cost (\$ in Millions)	994.332	551.192	601.283	531.656	0.000	531.656	483.375	579.978	651.832	710.667	5,694.496	10,798.811
Less PY Advance Procurement (\$ in Millions)	126.621	55.652	57.266	58.522	-	58.522	20.139	60.756	103.855	84.331	836.097	1,403.239
Net Procurement (P-1) (\$ in Millions)	867.711	495.540	544.017	473.134	0.000	473.134	463.236	519.222	547.977	626.336	4,858.399	9,395.572
Plus CY Advance Procurement (\$ in Millions)	182.273	57.266	58.522	20.139	-	20.139	60.756	103.855	84.331	86.018	750.079	1,403.239
Total Obligation Authority (\$ in Millions)	1,049.984	552.806	602.539	493.273	0.000	493.273	523.992	623.077	632.308	712.354	5,608.478	10,798.811
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	114.652	43.903	171.874	-	171.874	4.730	11.861	2.793	-	-	349.813
Flyaway Unit Cost (\$ in Thousands)	139,802.833	129,299.667	133,573.333	146,065.500	-	146,065.500	135,145.500	138,577.333	115,119.400	114,514.200	136,621.778	133,417.569
Gross/Weapon System Unit Cost (\$ in Thousands)	165,722.000	183,730.667	200,427.667	265,828.000	-	265,828.000	241,687.500	193,326.000	130,366.400	142,133.400	158,180.444	166,135.554

Description:

The MQ-4C Triton Unmanned Air System (UAS) is integral to recapitalizing the Navy's Maritime Patrol and Reconnaissance Force. The MQ-4C Triton UAS provides a persistent maritime and littoral Intelligence, Surveillance, and Reconnaissance (ISR) data collection and dissemination capability to the fleet, serving as a force multiplier for the Joint Force and Fleet Commander, enhancing situational awareness of the battle space and shortening the sensor-to-shooter kill chain. Teamed with its manned-capability counterpart, the P-8A, Triton will be a key component of the Navy's family of systems to achieve maritime domain awareness. The MQ-4C air vehicle, mission control system, specialized sensors, and communications suite will play a significant role in achieving the Navy's strategic vision for the 21st century. The Triton system as a persistent ISR enabler provides the supported combatant commander and fleet commander with unparalleled situational awareness of the maritime battle space to develop and sustain the Common Operational Tactical Picture (COTP). The system will also serve as a Fleet response plan enabler with a persistent, global force offering to provide critical trip wire information for intelligence preparation of the environment. Triton will connect to both the Global Information Grid and the Distributed Common Ground System-Navy information backbone to provide the Warfighter with increased levels of battlespace awareness to synchronize actions necessary to maintain maritime Full Spectrum Superiority. Triton's on-station time and range enables unmatched awareness of the maritime battlespace by sustaining the COTP for Surface Warfare and the Overseas Contingency Operation.

MQ-4C Triton includes an endurance-class UAS that will operate from land-based sites around the world. Unmanned aircraft at each operating location will provide persistent maritime ISR orbits by being airborne 24 hours a day, 7 days a week out to ranges of 2,000 nautical miles. Worldwide access will be achieved by providing coverage to nearly all the world's high-density sea-lanes, littorals and areas of national interest from its operating locations. Triton will leverage the Maritime Patrol and Reconnaissance Forces community to enhance manpower, training and maintenance efficiencies.

MQ-4C Triton UAS sensors will provide detection, classification, tracking and identification of maritime targets. Sensors to fulfill mission requirements include maritime radar, electro-optical/infrared and Electronic Support Measures systems. Additionally, Triton will have a communications relay capability linking dispersed forces in the theater of operation and serving as a node in the Navy's networked strategy. The MQ-4C Triton UAS will support the Fleet Commander's COTP of the battlespace, day and night. The UAS will cue other Navy assets for further situational investigation and/or attack, and will also provide battle damage assessment of the area of interest. Tactical-level data analysis will occur in real-time at shore-based Mission Control Systems via satellite communications. Further intelligence exploitation can be conducted at shore-based sites or aboard Carrier Vessel Nuclear/Landing Helicopter Dock ships.

DT&E: 4Q FY 2012 - 4Q FY 2020 OT&E: 1Q FY 2021 - 3Q FY 2021

FRP: 4Q FY 2021

UNCLASSIFIED
Page 1 of 10 P-1 Line #23

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0442 / MQ-4 TRITON

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0305220N, 0305421N

Other Related Program Elements: N/A

Date: March 2019

Line Item MDAP/MAIS Code: 373

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / RQ-4 UAV	P-5a, P-21			6 / 994.332	3 / 551.192	3 / 601.283	2 / 531.656	- / 0.000	2 / 531.656
P-40	Total Gross/Weapon System Cost				6 / 994.332	3 / 551.192	3 / 601.283	2 / 531.656	- / 0.000	2 / 531.656

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding

Justification:

FY 2020 request includes two Low Rate Initial Production (LRIP) MQ-4C Triton Unmanned Air Systems (UAS) in the Multi-INT configuration, Interim Contractor Support of the baseline Early Operational Capability, and efforts to stand up organic repair and maintenance capability to ensure Orbit standup meets warfighter demands.

The quantity reduction of MQ-4C production in FY 2020/FY 2021 results from the Department decision to fund product support wholeness with required funding to stand up organic depot and intermediate repair and maintenance capability for the FY 2021 IOC, and material support date requirements. The reduction also provided funding to adequately resource Multi-INT (Integrated Functional Capability 4.0 (IFC 4.0)) development, the FY 2021 Multi-INT IOC, and accelerate IFC 5.0 phased capability development.

Note: Under a U.S/Australia Cooperative Program agreement, Australia plans to procure one MQ-4C in FY 2020 and award contracts for additional quantities through FY 2022.

Page 2 of 10

Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0442 / MQ-4 TRITON	1 / RQ-4 UAV

ID Code (A=Service Ready, B=Not Service Ready):		M	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	6	3	3	2	-	2
Gross/Weapon System Cost (\$ in Millions)	994.332	551.192	601.283	531.656	0.000	531.656
Less PY Advance Procurement (\$ in Millions)	126.621	55.652	57.266	58.522	-	58.522
Net Procurement (P-1) (\$ in Millions)	867.711	495.540	544.017	473.134	0.000	473.134
Plus CY Advance Procurement (\$ in Millions)	182.273	57.266	58.522	20.139	-	20.139
Total Obligation Authority (\$ in Millions)	1,049.984	552.806	602.539	493.273	0.000	493.273
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reques	ts are documented elsewhe	re.)		
Initial Spares (\$ in Millions)	-	114.652	43.903	171.874	-	171.874
Gross/Weapon System Unit Cost (\$ in Thousands)	165,722.000	183,730.667	200,427.667	265,828.000	-	265,828.000

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	;		FY 2018			FY 2019		FY	2020 Bas	se	FY	2020 OC	0	FY	2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost		Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost
Flyaway Cost		'		·				'								· · · · · ·		
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	78,137.333	6	468.824	65,781.667	3	197.345	67,729.330	3	203.188	72,182.000	2	144.364	-	-	-	72,182.000	2	144.
1.1.2) CFE Electronics	-	-	169.331	-	-	102.156	-	-	89.894	-	-	63.181	-	-	-	-	-	63.
1.1.3) GFE Electronics	-	-	0.429	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.1.4) Engines/Eng Acc ⁽²⁾	-	-	14.149	-	-	12.352	-	-	12.528	-	-	8.540	-	-	-	-	-	8.
1.1.5) Other GFE	-	-	17.335	-	-	31.578	-	-	26.354	-	-	21.986	-	-	-	-	-	21.
1.1.6) Rec Flyaway ECO	-	-	-	-		6.420	-	-	7.259	-	-	5.095	-	-	-	-	-	5.
Subtotal: Recurring Cost	-	-	670.068	-	-	349.851	-	-	339.223	-	-	243.166	-	-	-	-	-	243.
Non Recurring Cost																		
1.2.1) Non-Recur Cost	-	-	121.758	-	-	35.092	-	-	30.603	-	-	24.830	-	-	-	-	-	24.
1.2.2) Other (4)	-	-	46.991	-	-	2.956	-	-	30.894	-	-	24.135	-	-	-	-	-	24.
Subtotal: Non Recurring Cost	-	-	168.749	-	=	38.048	-	-	61.497	-	-	48.965	-	-	-	-	-	48.
Subtotal: Flyaway Cost	-	-	838.817	-	-	387.899	-	-	400.720	-	-	292.131	-	-	-	-	-	292.
Support Cost										·								
2.1) Airframe PGSE (5)	-	-	52.985	-	-	60.977	-	-	84.186	-	-	133.988	-	-	-	-	-	133.
2.2) Pec Training Equip	-	-	24.301	-	-	15.682	-	-	18.977	-	_	12.356	-	_	-	_	-	12

UNCLASSIFIED
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Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
,, ,,	P-1 Line Item Number / Title: 0442 / MQ-4 TRITON	Item Number / Title [DODIC]: 1 / RQ-4 UAV
130011 / 04 / 1	U442 / IVIQ-4 TRITON	17 KQ-4 UAV

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

MDAP/MAIS Code:

	P	rior Years	5		FY 2018			FY 2019		F۱	/ 2020 Ba	se	F'	Y 2020 OC	0	F	Y 2020 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
2.3) Pub/Tech Equip (6)	-	-	5.627	-	-	8.536	-	-	11.429	-	-	13.497	-	-	-	-	-	13.497
2.4) Prod Eng Supt	-	-	28.739	-	-	30.400	-	-	31.207	-	-	31.219	-	-	-	-	-	31.219
2.5) Other ILS (7)	-	-	43.863	-	-	47.698	-	-	54.764	-	-	48.465	-	-	-	-	-	48.465
Subtotal: Support Cost	-	-	155.515	-	-	163.293	-	-	200.563	-	-	239.525	-	-	-	-	-	239.525
Gross/Weapon System Cost	165,722.000	6	994.332	183,730.667	3	551.192	200,427.667	3	601.283	265,828.000	2	531.656	-	-	0.000	265,828.000	2	531.656

(†) indicates the presence of a P-5a

ID Code (A=Service Ready, B=Not Service Ready) :

Footnotes:

- (1) Escalation for flyaway cost elements has been estimated using Global Insight indices and Forward Pricing Rate Agreements. The unit cost increase in FY 2020 and FY 2021 is due to escalation and higher projected costs in the FY 2018 procurement.
- (2) Engines will be delivered with airframes.
- (3) Non-recurring Engineering is estimated for resolution of diminishing manufacturing sources and material shortages (DMSMS) and supporting technology refreshment on commercial off the shelf (COTS) based components.
- (4) Other funds Ground Control Station hardware. In FY 2018-2021 the ground stations will be procured in the Multi-INT configuration.
- (5) Increases in Airframe PGSE line reflect investment required to stand up organic depot and intermediate repair and maintenance capability. Growth from FY 2020 is aligned with the procurement of long lead time materials needed to support the delivery and staging of ground support equipment essential to the stand-up of additional orbits (unit deployment locations) in FY 2021 and FY 2022. This equipment is required to support flight operations of the operational units. Organic depot and intermediate level repair and maintenance standup creates the capability for the Navy to support Triton operations at a lower lifecycle cost at required readiness levels.
- (6) The yearly funding requirement for the Pub/Tech Equipment cost element varies across the FYDP based on the schedule required to procure and standup Intermediate, Organizational, and Depot level maintenance systems required in support of Initial Operational Capability (IOC), Triton's Material Support Date (MSD) and to establish core depot maintenance capabilities within 4 years of IOC, supporting Section 2464 of Title 10, United States Code. Increases from FY 2019 are related to the requirement to complete the generation and verification of the Interactive Electronic Technical Manuals (IETM) to support the fielding of the Multi-INT configuration starting in FY 2021.
- (7) Other ILS funds Interim Contractor Support requirements for the Triton system prior to MSD. Other ILS includes support for the prime contractor.

P-1 Line #23

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Exhibit P-5a, Procurement History and Planning: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 04 / 1

P-1 Line Item Number / Title:
0442 / MQ-4 TRITON

1 / RQ-4 UAV

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
1.1.1) Airframe/CFE ^(†)		2016	Northrop Grumman / Rancho Bernardo, CA	SS / FPIF	NAVAIR	Aug 2016	Dec 2018	4	74,675.500	Y		Sep 2014
1.1.1) Airframe/CFE ^(†)		2017	Northrop Grumman / Rancho Bernardo, CA	SS / FPIF	NAVAIR	May 2017	Feb 2020	2	85,061.000	Y		Sep 2015
1.1.1) Airframe/CFE ^(†)		2018	Northrop Grumman <i>I</i> Rancho Bernardo, CA	SS / FPIF	NAVAIR	Dec 2017	Jan 2021	3	65,781.667	Y		Sep 2016
1.1.1) Airframe/CFE ^(†)		2019	Northrop Grumman <i>I</i> Rancho Bernardo, CA	SS / FP	NAVAIR	Apr 2019	Dec 2021	3	67,729.330	Y		Sep 2017
1.1.1) Airframe/CFE ^(†)		2020	Northrop Grumman <i>I</i> Rancho Bernardo, CA	SS/FP	NAVAIR	Apr 2020	Feb 2023	2	72,182.000	Y		Sep 2018

^(†) indicates the presence of a P-21

LI 0442 - MQ-4 TRITON Navy

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1.1.1) Airfra	ame/CFE ⁽¹)																												
1	201	16 NAVY		4 (8)	0	4											Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	4
1	201	17 NAVY		2	0	2																				Α -	-	-	-	-	2
1	201	18 NAVY		3	0	3																					•				3
1	201	9 NAVY		3	0	3																									3
1	202	20 NAVY		2	0	2																									2
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		riation / 1 04 / 1	Budge	et Acti	vity /	Budç	get S	ub Ac	tivity	:			Item Q-4 T			Title:							1	Num RQ-4 l	iber / UAV	Title	[DOI)IC]:		
			ements n Each)								Fiscal Y	ear 2018											Fiscal Y	ear 2019						В
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1.1.1	I) Airfram	e/CFE (1)			ı					ı					ı		ı							I.						
	1 2016	NAVY	4 (8)	0	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-	-	-	-	-	-	1
	1 2017	NAVY	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
1	1 2018	NAVY	3	0	3			Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
1	1 2019	NAVY	3	0	3																			Α -	-	-	-	-	-	3
	1 2020	NAVY	2	0	2																									2
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											Fiscal Y	ear 2020											Fiscal Y	ear 2021					
				ACCEPT									С	alendar	Year 202	:0	,							Caler	ndar Year	2021			
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.1.1) Airfr	ame/CFE (1)			,					,															,			<u>'</u>	
1	N																												
1	20	17 NAVY	2	0	2	-	-	-	-	1	-	-	-	1															
1	20	18 NAVY	3	0	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	1		
1	20	19 NAVY	3	0	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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			ost Elemen Inits in Eacl									Fiscal Y	ear 2022											Fiscal Y	ear 2023						
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1.1.	.1) Airf	rame/CFE ⁽¹)																												
	1 20	016 NAVY	4	(8)	4	0		-																							
	1 20	017 NAVY		2	2	0																									
	1 20	018 NAVY		3	3	0																									
	1 20	019 NAVY		3	0	3	-	-	1	-	-	-	-	-	-	1	-	-	1												
	1 20	020 NAVY		2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	
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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0442 / MQ-4 TRITON	1 / RQ-4 UAV

		Produc	ction Rates (Each	/ Year)				Procurement Lea	adtime (Months)			
MFR						Init	ial			Reo	rder	
Ref #	I .	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Northrop Grumman - Rancho Bernardo, CA	3	6	12	12	10	21	31	12	7	34	41

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

 $^{(8)}\,\mathrm{FY}$ 2016 funding provides for 3 aircraft in LRIP-1 and 1 aircraft in LRIP-2

LI 0442 - MQ-4 TRITON

Navy

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0442 / MQ-4 TRITON

Program Elements for Code B Items: 0305220N, 0305421N

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 373

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Gross/Weapon System Cost (\$ in Millions)	182.273	57.266	58.522	20.139	-	20.139	60.756	103.855	84.331	86.018	750.079	1,403.239
Net Procurement (P-1) (\$ in Millions)	182.273	57.266	58.522	20.139	-	20.139	60.756	103.855	84.331	86.018	750.079	1,403.239
Total Obligation Authority (\$ in Millions)	182.273	57.266	58.522	20.139	-	20.139	60.756	103.855	84.331	86.018	750.079	1,403.239

Description:

The MQ-4C Triton Unmanned Air System (UAS) is integral to recapitalizing the Navy's Maritime Patrol and Reconnaissance Force. The MQ-4C Triton UAS provides a persistent maritime and littoral Intelligence, Surveillance, and Reconnaissance (ISR) data collection and dissemination capability to the fleet, serving as a force multiplier for the Joint Force and Fleet Commander, enhancing situational awareness of the battle space and shortening the sensor-to-shooter kill chain. Teamed with its manned-capability counterpart, the P-8A, Triton will be a key component of the Navy's family of systems to achieve maritime domain awareness. The MQ-4C air vehicle, mission control system, specialized sensors, and communications suite will play a significant role in achieving the Navy's strategic vision for the 21st century. The Triton system as a persistent ISR enabler provides the supported combatant commander and fleet commander with unparalleled situational awareness of the maritime battle space to develop and sustain the common operational tactical picture. The system will also serve as a Fleet response plan enabler with a persistent, global force offering to provide critical trip wire information for intelligence preparation of the environment. Triton will connect to both the Global Information Grid and the Distributed Common Ground System-Navy information backbone to provide the Warfighter with unprecedented levels of battlespace awareness to synchronize actions necessary to maintain maritime Full Spectrum Superiority. Triton's on-station time and range enables unmatched awareness of the maritime battlespace by sustaining the Common Operational Tactical Picture (COTP) for Surface Warfare and the Overseas Contingency Operation.

MQ-4C Triton includes an endurance-class UAS that will operate from land-based sites around the world. Unmanned aircraft at each operating location will provide persistent maritime ISR orbits by being airborne 24 hours a day, 7 days a week out to ranges of 2,000 nautical miles. Worldwide access will be achieved by providing coverage to nearly all the world's high-density sea-lanes, littorals and areas of national interest from its operating locations. Triton will leverage the Maritime Patrol and Reconnaissance Forces community to enhance manpower, training and maintenance efficiencies.

MQ-4C Triton UAS sensors will provide detection, classification, tracking and identification of maritime targets. Sensors to fulfill mission requirements include maritime radar, electro-optical/infrared and Electronic Support Measures systems. Additionally, Triton will have a communications relay capability linking dispersed forces in the theater of operation and serving as a node in the Navy's networked strategy. The MQ-4C Triton UAS will support the Fleet Commander's common operational tactical picture COTP of the battlespace, day and night. The UAS will cue other Navy assets for further situational investigation and/or attack, and will also provide battle damage assessment of the area of interest. Tactical-level data analysis will occur in real-time at shore-based Mission Control Systems via satellite communications. Further intelligence exploitation can be conducted at shore-based sites or aboard Carrier Vessel Nuclear/Landing Helicopter Dock ships.

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 P-1 Line #24

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0442 / MQ-4 TRITON

Program Elements for Code B Items: 0305220N, 0305421N

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 373

	Exhibits Schedule			Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-10	1 / RQ-4 UAV			6 / 182.273	3 / 57.266	3 / 58.522	2 / 20.139	- / -	2 / 20.139
P-40	Total Gross/Weapon System Cost			6 / 182.273	3 / 57.266	3 / 58.522	2 / 20.139	- 1 -	2 / 20.139

^{*}Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2020 requests Advanced Procurement to support long lead requirements for one FY 2021 Low Rate Initial Production (LRIP) MQ-4C Triton Unmanned Air Systems in the Multi-INT configuration. FY 2019 request changed to support two FY 2020 LRIP UAS and one FY 2021 LRIP UAS.

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Exhibit P-10, Advance Procuremen	t Requiren	nents Analysi	s (page 1	- Budget Funding Just	ification):	PB 2020 Navy	Date: March 2019		
Appropriation / Budget Activity / Bo 1506N / 04 / 1	udget Sub	Activity:	1	Item Number / Title: Q-4 TRITON			P-5 Number / Title 1 / RQ-4 UAV	9 :	
First System (2020) Award Date: January 2016	First Syste January 20	m (2020) Comple 18	etion Date:			erval Between Syste Months	ems:		
RQ-4 UAV		Production L		Prior Years (Each)		' 2018 'Each)	FY 2019 (Each)	FY 2020 (Each)	
Quantity				6		3	3		2
Cost Elements		When Req		Prior Years (\$ M)		′ 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)	
CFE						<u> </u>	<u> </u>		
CFE - Airframe T.L.			0	182.273		57.266	39.015		-
CFE - Airframe T.L. (LRIP-6)			0	-		-	19.507		20.139
Total: CFE				182.273		57.266	58.522		20.139
Total Advance Procurement/Obligation Auti	nority			182.273		57.266	58.522		20.139

Exhibit P-10, Advance Procurement Requirements Analysis	s (page 2 - Budget Funding Justification): PB 2020 Navy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	P-5 Number / Title:
1506N / 04 / 1	0442 / MQ-4 TRITON	1 / RQ-4 UAV

1300147 047 1	0442 / WQ-4	11(1101)			17119-40	A V	
			•	FY 2	2020	•	
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2020 Qty (Each)	For FY	Total Cost Request (\$ M)
CFE							
CFE - Airframe T.L.	0						-
CFE - Airframe T.L. (LRIP-6)	0						20.139
Total: CFE							20.139
Total Advance Procurement/Obligation Authority							20.139

Description:

The MQ-4C Triton Advance Procurement (AP) funding will be used to procure long lead CFE material for subsystems such as, but not limited to, the Multi-Function Active Sensor (MFAS) radar, landing gear, wings, and wide band command and control system. Airframe/CFE requirements are calculated on a Termination Liability (TL) basis, reflecting the contractor's funding requirements for procurement of long lead parts and materials necessary to protect the delivery schedule. The TL for LRIP 6 (quantity 2 in FY 2021) is resourced from FY 2019 AP (one UAS) and FY 2020 AP (one UAS).

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0443 / MQ-8 UAV

ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 253

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	55	6	-	-	-	-	-	-	-	-	-	61
Gross/Weapon System Cost (\$ in Millions)	1,081.336	128.812	89.061	44.957	0.000	44.957	40.377	59.222	40.485	41.288	56.632	1,582.170
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,081.336	128.812	89.061	44.957	0.000	44.957	40.377	59.222	40.485	41.288	56.632	1,582.170
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,081.336	128.812	89.061	44.957	0.000	44.957	40.377	59.222	40.485	41.288	56.632	1,582.170
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	0.243	-	0.099	-	0.099	-	-	-	-	15.939	16.281
Flyaway Unit Cost (\$ in Thousands)	14,762.891	16,327.333	-	-	-	-	-	-	-	-	-	16,572.246
Gross/Weapon System Unit Cost (\$ in Thousands)	19,660.655	21,468.667	-	-	-	-	-	-	-	-	-	25,937.213

Description:

The MQ-8 Unmanned Air System (popular name "Fire Scout") provides real-time and non-real-time Intelligence, Surveillance and Reconnaissance (ISR) data to tactical users without the use of manned aircraft or reliance on limited joint theater or national assets. The baseline MQ-8 can accomplish missions including over-the-horizon tactical reconnaissance, classification, targeting and laser designation and battle damage assessment (including voice communications relay). The MQ-8 launches and recovers vertically, and can operate from suitably-equipped air capable ships, as well as confined area land bases. Interoperability is achieved through the use of the Tactical Control System (TCS) software in the mission control system (MCS), also referred to as a Ground Control Station (GCS), and through the use of the Tactical Common Data Link (TCDL). The data from the MQ-8 is provided through standard DoD Command, Control, Communications, Computers and ISR (C4ISR) system architectures and protocols.

The MQ-8 program includes both MQ-8B and MQ-8C AVs as well as the MCS and other ancillary equipment. The program achieved Milestone C in June 2017.

A deployed MQ-8 system includes AV(s), payloads (i.e. electro-optical/infrared/laser designator-range finder, Automated Identification System, voice communications relay, Radar, Weapons, and other specialty payloads), MCS (with TCS and TCDL integrated for interoperability), a Unmanned Aerial Vehicle Common Automatic Recovery Systems (UCARS) for automatic launch and recovery, and associated spares and support equipment. The quantities and schedules for MCS and UCARS components are based on host ship requirements, while quantities and schedules for air vehicle components, support equipment, and training equipment are based on operational deployment plans. A limited number of land-based MCS supplement the shipboard systems to support shore-based operations, such as pre-deployment or acceptance functional check flights. These land-based MCS will also support depot-level maintenance/post-maintenance activities. The MQ-8C provides additional mission endurance and payload-weight-power, increased reliability, and improved maintainability to the MQ-8 system.

MQ-8 systems will support missions on Littoral Combat Ship (LCS) and/or suitably-equipped air capable ships. Quantities of air vehicles are derived from LCS and/or suitably-equipped air capable ship deployment requirements for Surface Warfare and Mine Countermeasures mission sets.

This budget prioritizes system wholeness for mission control systems (MCS), trainers/training equipment, peculiar support equipment, publications and technical data over continued air vehicle procurements. System wholeness is required to field and support procured air vehicles and MCS in support of operations onboard Littoral Combat Ship (LCS), other suitably equipped air capable ships, and land-based MQ-8 requirements.

In order to maintain the IOC dates, operational deployment tempo, envisioned readiness posture, and production shutdown actives the following Cost Elements' require funding: Non-Recurring Cost, Ancillary Equipment, Airframe PGSE, Peculiar Training Equipment, Pub/Tech Equipment, Production Engineering Support, and Other ILS Support Costs.

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Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

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Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0443 / MQ-8 UAV

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Date: March 2019

Line Item MDAP/MAIS Code: 253

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / MQ-8 UAV	P-5a, P-21			55 / 1,081.336	6 / 128.812	- / 89.061	- / 44.957	- / 0.000	- / 44.957
P-40	Total Gross/Weapon System Cost				55 / 1,081.336	6 / 128.812	- / 89.061	- / 44.957	- / 0.000	- / 44.957

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2020 funding provides ship ancillary equipment for FY 2020 LCS production hulls and fleet mobile Mission Control Stations (MCS) for training and proficiency which includes MCS, UCARS, support equipment, Tactical Common Data Link systems and specialty payloads; quantity and cost can vary by shipboard deployment need date and requirement.

This budget continues to procure Support elements to include peculiar training equipment, peculiar support equipment for airframe and avionics requirements, publications, and production support. Other Integrated Logistics Support includes production reach back, depot standup, and government logistics support requirements necessary to field the MQ-8 system. The quantities and schedules for MCS and UCARS components are based on host ship requirements, while quantities and schedules for air vehicle components, support equipment, and training equipment are based on operational deployment plans. These cost elements are required to maintain the planned IOC dates, operational deployment tempo, envisioned readiness posture, and production shutdown activities.

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Date: March 2019 Exhibit P-5, Cost Analysis: PB 2020 Navy Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 1506N / 04 / 1 0443 / MQ-8 UAV 1 / MQ-8 UAV

ID Code (A=Service Ready, B=Not Service Ready):		M	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	55	6	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	1,081.336	128.812	89.061	44.957	0.000	44.957
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,081.336	128.812	89.061	44.957	0.000	44.957
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,081.336	128.812	89.061	44.957	0.000	44.957
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reques	ts are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	0.243	-	0.099	-	0.099
Gross/Weapon System Unit Cost (\$ in Thousands)	19,660.655	21,468.667	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	;		FY 2018			FY 2019		FY	2020 Ba	se	F۱	2020 OC	:0	F۱	/ 2020 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost		'					· · · · · · · · · · · · · · · · · · ·			'		'			·	'		
Recurring Cost																		
1.1.1) Airframe/CFE ^(†)	10,817.564	55	594.966	8,911.000	6	53.466	-	-	-	-	-	-	-	-	-	-	-	
1.1.2) GFE Electronics	-	-	97.722	-	-	30.534	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Recurring Cost	-	-	692.688	-	-	84.000	-	-	-	-	-	-	-	-	-	-	-	
Non Recurring Cost																		
1.2.1) Non-Recur Cost	-	-	16.690	-	-	1.165	-	-	6.560	-	-	-	-	-	-	-	-	
1.2.2) Ancillary Equipment ⁽²⁾	-	-	102.581	-	-	12.799	-	-	49.981	-	-	12.045	-	-	-	-	-	12.0
Subtotal: Non Recurring Cost	-	-	119.271	-	-	13.964	-	-	56.541	-	-	12.045	-	-	-	-	-	12.0
Subtotal: Flyaway Cost	-	-	811.959	-	-	97.964	-	-	56.541	-	-	12.045	-	-	-	-	-	12.0
Support Cost																		
2.1) Airframe PGSE (3)	-	-	11.743	-	-	3.092	-	-	0.035	-	-	4.147	-	-	-	-	-	4.1
2.2) Avionics PGSE	-	-	0.287	-	-	-	-	-	2.864	-	-	0.225	-	-	-	-	-	0.2
2.3) Peculiar Training Equipment	-	-	65.223	-	-	6.601	-	-	8.555	-	-	6.882	-	-	-	-	-	6.8
2.4) Pubs/Tech Equipment	-	-	8.155	-	-	2.303	-	-	4.311	-	-	4.478	-	-	-	-	-	4.4
2.5) Production Engineering Support	-	-	131.828	-	-	11.767	-	-	10.011	-	-	10.291	-	-	-	-	-	10.2
2.6) Other ILS Support	-	-	52.141	-	-	7.085	-	-	6.744	-	-	6.889	-	-	-	-	-	6.8

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Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0443 / MQ-8 UAV	1 / MQ-8 UAV

ID Code (A=Service Ready, B=Not Service Ready):

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

MDAP/MAIS Code:

					,													
	F	Prior Years	3		FY 2018			FY 2019		F۱	/ 2020 Ba	se	F	/ 2020 OC	0	FY	/ 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Subtotal: Support Cost	-	-	269.377	-	-	30.848	-	-	32.520	-	-	32.912	-	-	-	-	-	32.912
Gross/Weapon System Cost	19,660.655	55	1,081.336	21,468.667	6	128.812	-	-	89.061	•	-	44.957	-	-	0.000	-	-	44.957

^(†) indicates the presence of a P-5a

Footnotes:

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⁽¹⁾ The total quantity under cost element 1.1.1 "Airframe/CFE" should reflect 59. Due to the Congressional Adds received in FY17 and FY18, the authorized procurement was for five (5) and six (6) MQ-8C Air Vehicles (AV) respectively. As negotiations continued and pricing appeared to become more definitive, this confirmed that the cost per AV would only provide sufficient funding to procure four (4) AV's in FY17 and five (5) AV's in FY18. Additionally, the authorized funding limited the programs ability to procure Government Furnished Equipment required to be provided to the Northrop Grumman Corp for each AV. Once the FY18 contract awards in 2QFY19, the technical correction identified will be adjusted.

⁽²⁾ FY19 Congressional add for \$34.3M to procure 3 Mission Control Systems under CE 1.2.2 Ancillary Equipment.

⁽³⁾ FY20 increase to Airframe PGSE aligns to requirements approved in the June 2017 Milestone C approved cost estimate and supports fielding of the MQ-8 system with required support equipment. Support equipment procurements are required across the FYDP and are aligned to Littoral Combat Ships and/or other suitably-equipped air capable ships production, aviation squadrons standup in accordance with Naval Aviation Master Plan, and depot requirements.

Exhibit P-5a, Procurement History and Planning: PB 2020 N	lavy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0443 / MQ-8 UAV	1 / MQ-8 UAV

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)	1	2015	Northrop Grumman / San Diego	SS / CPIF	NAVAIR	Sep 2016	Sep 2018	5	9,874.200	Υ		Jul 2014
1.1.1) Airframe/CFE ^(†)		2016	Northrop Grumman / San Diego	SS / FPIF	NAVAIR	Sep 2016	Feb 2019	5	11,916.800	Υ		Jul 2015
1.1.1) Airframe/CFE ^(†)		2017	Northrop Grumman / San Diego	SS / FPIF	NAVAIR	Dec 2017	Sep 2019	4	10,960.000	Υ		May 2016
1.1.1) Airframe/CFE ^(†)		2018	Northrop Grumman / San Diego	SS / FPIF	NAVAIR	Feb 2019	Jun 2021	6	8,911.000	Υ		Apr 2018

^(†) indicates the presence of a P-21

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Ex	hibit F	P-21, Pro	oducti	ion Sc	hedu	le: Pl	3 202	0 Nav	v y														Date	: Maı	rch 20)19				
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			lements in Each)								Fiscal	Year 2016	3										Fiscal Y	ear 2017						В
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1.1	.1) Airfram	e/CFE ⁽¹⁾								<u>'</u>				<u>'</u>	'										'					
Pri	or Years De	eliveries: 41																												
✓	1 2015	NAVY	5	C	5												Α -	-	-	-	-	-	-	-	-	-	-	-	-	
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			ation / 04 / 1	Budg	et Acti	vity /	Bud	get S	ub Ac	tivity	:		_	Item Q-8 L	-	ber /	Title:								Num 1Q-8 l		Title	[DOI	DIC]:		
				lements in Each)								Fiscal Y	ear 2018	1										Fiscal Y	ear 2019						ВА
					ACCEPT									C	alendar	Year 20	8								Calen	dar Year	2019] [
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1.1.1	1) Ai	irframe	/CFE (1)								'						'								'						
Prior	r Ye	ars De	liveries: 41																												
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Ľ	1 2	2018	NAVY	6	0	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	<u> </u>
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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0443 / MQ-8 UAV	1 / MQ-8 UAV

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						Ir	itial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Northrop Grumman - San Diego	6	10	33	0	(0	0	5	6	28	34

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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P-1 Line #25

Volume 1 - 202

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0444 / STUASLO

ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: N/A Other Related Program Elements: 0305234N, 0305239M

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	15	-	-	-	-	-	-	-	-	-	-	15
Gross/Weapon System Cost (\$ in Millions)	193.454	9.980	46.931	43.819	7.921	51.740	41.860	31.350	30.421	29.107	-	434.843
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	193.454	9.980	46.931	43.819	7.921	51.740	41.860	31.350	30.421	29.107	-	434.843
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	193.454	9.980	46.931	43.819	7.921	51.740	41.860	31.350	30.421	29.107	-	434.843
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	12,554.667	-	-	-	-	-	-	-	-	-	-	26,840.467
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

In FY 2019, the RQ-21A Blackjack Unmanned Aircraft System (UAS) program was consolidated and transitioned from being funded in Budget Line Items (BLI) 4737 (RQ-21 UAS) and 4787 (UAS Payloads) Procurement, Marine Corps (PMC) to BLI 0444 (STUASLO) Aircraft Procurement, Navy (APN). Current inventory of USN RQ-21 systems has been satisfied and FY 2017 is the last year of USN RQ-21A BLACKJACK system procurements. The USMC, however, continues to fund RQ-21A BLACKJACK system procurements in FY 2018 with Procurement, Marine Corps (PMC), Budget Line Item (BLI) 4737 and 4787. There are no plans to buy more USMC RQ-21 systems at this time, however RQ-21 System Component - Air Vehicles (AV) will be procured.

The requirement for the RQ-21A BLACKJACK (formerly known as The Small Tactical Unmanned Aircraft System (STUAS)) Unmanned Aircraft System is defined in Capability Development Document, dated 18 November 2008 and further defined in the Capability Production Document, dated 15 February 2013. The RQ-21A BLACKJACK program entered the Engineering and Manufacturing Development (EMD) phase of the acquisition process as an Acquisition Category III program on 26 July 2010. On 19 August 2014, RQ-21A BLACKJACK was designated an Acquisition Category III program.

The RQ-21A BLACKJACK is a combined United States Navy (USN) and United States Marine Corps (USMC) program that provides persistent maritime and land-based tactical Intelligence, Surveillance, and Reconnaissance/Target Acquisition support. It is capable of providing actionable intelligence and communications relay for 12-hours of continuous operation per day with a short surge capability of 24-hours continuous operation. The system has an operational radius of 50 nautical miles, further extendable through hub and spoke operations. The Air Vehicle (AV) is capable of airspeeds up to 80 nautical miles per hour with a service ceiling of 15,000 feet. This system brings commanders a dedicated and cost effective airborne ISR sensor system capable of providing actionable intelligence in real time. As an organic, tactical UAS, it supports unit-level force defense, force protection for Naval amphibious assault ships (multi-ship classes) as well Navy and Marine Corp land forces. Furthermore, the RQ-21A will support Naval Missions such as development of a Recognized Maritime Picture, Maritime Security Operations, Maritime Interdiction Operations, and provide support for Naval Units operating from sea/shore in Overseas Contingency Operations.

The RQ-21A BLACKJACK system will continue to evolve and upgrade capabilities to satisfy capabilities shortfalls, new requirements, and reliability, maintainability and safety issues. Upgraded capabilities may include Navy Command and Control integration, Weapons integration, Heavy Fuel Engine, Laser Designator, Frequency Agile Communications Relay, Digital Common Data Link, mobile ground control stations and cyclic refresh of the Electro-Optical/Infrared camera. RQ-21A BLACKJACK will also continue to expand its shipboard capability across new ship classes. An RQ-21A system consists of five air vehicles, two ground control stations, modular multi-mission plug and play payloads, one launcher, one recovery system, and support equipment. Standard payloads include a turret mounted EO/IR camera and a communications relay package with automated identification ship capability, carried in the payload bay. RQ-21 System Component - Air Vehicles (AV) was previously referred to as attrition air vehicles.

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 P-1 Line #26

 Volume 1 - 203

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0444 / STUASLO

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0305234N, 0305239M

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / USN RQ-21A Blackjack	P-5a, P-21			15 / 193.454	- / 9.980	- / 36.135	- / 43.819	- / 0.000	- / 43.819
P-5	2 / USMC RQ-21 BlackJack	P-5a, P-21			- / 0.000	- / 0.000	- / 10.796	- / 0.000	- / 7.921	- / 7.921
P-40	P-40 Total Gross/Weapon System Cost				15 / 193.454	- / 9.980	- / 46.931	- / 43.819	- / 7.921	- / 51.740

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY 2020 budget request will procure 16 USN RQ-21 System Component - Air Vehicle's, Mobile Ground Control Stations, Synthetic Aperture Radar (SAR)/Moving Target Indicator (MTI) payloads, and funds the Production Engineering Support relevant to the procurement of AV's.

OCO:

The FY 2020 OCO funding supports Joint Urgent Operational Need (JUON) 0265 and procures 5 USMC RQ-21 System Component - Air Vehicles

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 Volume 1 - 204

Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:
1506N / 04 / 1

P-1 Line Item Number / Title:
0444 / STUASLO

Item Number / Title [DODIC]:
1 / USN RQ-21A Blackjack

						* The state of the
ID Code (A=Service Ready, B=Not Service Ready):	·	М	DAP/MAIS Code:	·		
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	15	-	-	-	-	_
Gross/Weapon System Cost (\$ in Millions)	193.454	9.980	36.135	43.819	0.000	43.819
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	193.454	9.980	36.135	43.819	0.000	43.819
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	193.454	9.980	36.135	43.819	0.000	43.819
(The following Resource Summary rows are for informa	tional purposes only. The corre	esponding budget request	s are documented elsewhe	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	12 896 933	_	_	_	_	_

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	Pi	rior Years	i		FY 2018			FY 2019		FY	' 2020 Bas	se	FY	2020 OC	:0	F۱	2020 Tot	.al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) RQ-21A Systems ⁽¹⁾	10,838.500	10	108.385	-		0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
1.1.2) USN RQ-21 System Component - Air Vehicles ^{(†) (2)}	-	-	0.000	-	-	0.000	1,500.000	22	33.000	1,584.200	16	25.347	-	-	0.000	1,584.200	16	25.3
1.1.3) Mobile Ground Control Station (3)	-	-	0.000	-	-	0.000	-	-	0.000	-	-	2.387	-	-	0.000	-	-	2.3
1.1.4) Ancillary Equipment ⁽⁴⁾	-	-	24.854	-	-	1.542	-	-	0.000	-	-	13.499	-	-	0.000	-	-	13.4
1.1.5) Prior Year Scan Eagle Systems ⁽⁵⁾	5,640.000	5	28.200	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
Subtotal: Recurring Cost	-	-	161.439	-	-	1.542	-	-	33.000	-	-	41.233	-	-	0.000	-	-	41.2
Non Recurring Cost																		
1.2.1) ICS	-	-	22.782	-	-	3.900	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
1.2.2) Hardware for Ship Installation	-	-	3.450	-	-	0.880	-	-	1.070	-	-	0.000	-	-	0.000	-	-	0.0
1.2.3) USN Production Line Shut Down	-	-	0.649	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.0
Subtotal: Non Recurring Cost	-	-	26.881	-	-	4.780	-	-	1.070	-	-	0.000	-	-	0.000	-	-	0.0
Subtotal: Flyaway Cost	-	-	188.320	-	-	6.322	-	-	34.070	-	-	41.233	-	-	0.000	-	-	41.2
Support Cost																· · · · · · · · · · · · · · · · · · ·		

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P-1 Line #26

Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0444 / STUASLO	1 / USN RQ-21A Blackjack

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note. Subtotals of Totals II						- 5			-			-	_					
	F	Prior Years	5	FY 2018				FY 2019		F	/ 2020 Ba	se	F'	/ 2020 OC	0	FY 2020 Total		
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
2.1) Product Engineering Support	-	-	3.881	-	-	3.528	-	-	1.950	-	-	2.484	-	-	0.000	-	-	2.484
2.2) Other ILS	-	-	1.253	-	-	0.130	-	-	0.115	-	-	0.102	-	-	0.000	-	-	0.102
Subtotal: Support Cost	-	-	5.134	-	-	3.658	-	-	2.065	-	-	2.586	-	-	0.000	-	-	2.586
Gross/Weapon System Cost	12,896.933	15	193.454		-	9.980	-	-	36.135	-	-	43.819	-	-	0.000	-	-	43.819

^(†) indicates the presence of a P-5a

Footnotes:

- (1) An RQ-21A system consists of five air vehicles, two ground control stations, multi-mission (plug and play) payloads, one launcher and recovery system, and peculiar support equipment. Air Vehicles (AV) are procured with an Electro Optical / Infrared Turret. Additional payloads are carried within the payload bay and include a communications relay package and automated identification system. Launch and recovery systems are procured with associated peculiar support equipment. Peculiar support equipment includes the AV fueling system, AV starter, battery charging station, transportation assemblies, cooling systems, shore power assemblies, AV scale system, and associated cabling. RQ-21A system unit costs reflect the fully burdened cost of a system.
- (2) This cost element was titled "USN Attrition Air Vehicles" in prior budget submissions and is changed to a more appropriate title of "USN RQ-21 System Component Air Vehicle". Procurements required to replace the air vehicle components of the RQ-21A system lost during operations. The requirement for air vehicles is based on actual attrition rates observed from the first 8,400 flight hours of the RQ-21A system and projected reliability improvements from fixes to root causes of previous air vehicle losses, including differential GPS system, command and control data link logic, and engine reliability.
- (3) Increase in Mobile Ground Control Station supports combat operations by enabling the Command Unit/user to deploy with the required expeditionary capability to support remote operations while maintaining a minimal physical and manpower footprint.
- (4) Increase in ancillary equipment includes all program procured equipment to support a RQ-21A system. This equipment may include, but is not limited to: Tactical Intelligence, Surveillance and Reconnaissance Processing Exploitation and Dissemination System (TIPS), payloads to enable Signals Intelligence (SIGINT)/ Electronic Warfare Support (ES), Synthetic Aperture Radar (SAR) / Moving Target Indicator (MTI), and Wide Area and Hyperspectral Imagery collection. FY20 funding supports eighteen (18) SPLIT ACES payloads that provide nano-synthetic aperture radar capability including Moving Target Indicator and Coherent Change Detection capability.
- (5) Prior Year Inactive Funding: Prior year funding was associated with Naval Special Warfare (NSW) Scan Eagle procurement. No prior year funding was associated with RQ-21A procurement. The Scan Eagle system provides near real-time reconnaissance, surveillance and target detection/identification for Naval Special Warfare (NSW), USN and other coalition forces; providing tactical commanders with Reconnaissance, Surveillance, Target Acquisition (RSTA), Battle Damage Assessment (BDA), and battlefield capabilities. Scan Eagle is not a program of record. A Scan Eagle system consists of twelve (12) air vehicles, Ground Control Station(s) GCSs and associated launch and recovery equipment.

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Exhibit P-5a, Procurement History and Planning: PB 2020 N	avy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0444 / STUASLO	1 / USN RQ-21A Blackjack

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.2) USN RQ-21 System Component - Air Vehicles ^(†)	1	2019 (6)	Insitu, Inc. ⁽⁷⁾ / Bingen, WA	SS / FFP	NAVAIR HQ, Patuxent River, MD	Feb 2019	Apr 2019	22	1,500.000	Y		
1.1.2) USN RQ-21 System Component - Air Vehicles ^(†)		2020	Insitu, Inc. ⁽⁷⁾ / Bingen, WA	SS / FFP	NAVAIR HQ, Patuxent River, MD	Feb 2020	Apr 2020	16	1,584.200	Y		

^(†) indicates the presence of a P-21

Footnotes:

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⁽⁶⁾ FY 2019 USN RQ-21 System Components - Air Vehicles will award on the FY 2018 Full Rate Production Contract.

⁽⁷⁾ Production rates listed are for the RQ-21 System Component- Air Vehicle of the RQ-21A system. Planned FMS RQ-21 system procurements will likely keep production rates above MSR. The Program Office works closely with the manufacturer to mitigate any product quality reduction or cost increases if production falls below MSR.

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				lements in Each)							,	Fiscal Y	ear 2019	,										Fiscal Ye	ear 2020			,			В
					ACCEPT									С	alendar	Year 201	19								Calen	dar Year	2020				Ĺ
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1.1	1.2) L	JSN R	Q-21 System	Compone	nt - Air Veh	nicles (2)																			'						
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	1	2020	NAVY	16	0	16																	Α -	-	8	8				ļ	
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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0444 / STUASLO	1 / USN RQ-21A Blackjack

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFF						lr	nitial		Reo	rder		
Ref		MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Insitu, Inc. ⁽⁷⁾ - Bingen, WA	30	40	60	0		5 2	7	0	5	2	7

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

(7) Production rates listed are for the RQ-21 System Component- Air Vehicle of the RQ-21A system.	Planned FMS RQ-21 system procurements will likely keep production rates above MSR. The Program Office works closely with the
manufacturer to mitigate any product quality reduction or cost increases if production falls below MSF	

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Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:
1506N / 04 / 1

P-1 Line Item Number / Title:
0444 / STUASLO

Date: March 2019

Item Number / Title [DODIC]:
2 / USMC RQ-21 BlackJack

ID Code (A=Service Ready, B=Not Service Ready):		N	IDAP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	0.00	0 10.796	0.000	7.921	7.921
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	0.00	0 10.796	0.000	7.921	7.921
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	0.00	0 10.796	0.000	7.921	7.921
(The following Resource Summary rows are for informati	onal purposes only. The cor	responding budget reque	sts are documented elsewhe	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

																		,
	ı	Prior Years	s		FY 2018			FY 2019		FY	/ 2020 Ba	se	F۱	/ 2020 OC	0	FY 2020 Total		.al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) USMC RQ-21 System Component - Air Vehicles ^{(†) (8)}	-	-	0.000	-	-	0.000	1,500.000	2	3.000	-	-	0.000	1,584.200	5	7.921	1,584.200	5	7.921
1.1.2) Ancillary Equipment	-	-	0.000	-	-	0.000	-	-	4.140	-	-	0.000	-	-	0.000	-	-	0.000
1.1.3) Ship Integration	-	-	0.000	-	-	0.000	-	-	0.825	-	-	0.000	-	-	0.000	-	-	0.000
1.1.4) ICS	-	-	0.000	-	-	0.000	-	-	0.640	-	-	0.000	-	-	0.000	-	-	0.000
1.1.5) Product Engineering Support	-	-	0.000	-	-	0.000	-	-	2.191	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	0.000	-	-	0.000	-	-	10.796	-	-	0.000	-	-	7.921	-	-	7.921
Subtotal: Flyaway Cost	-	-	0.000	-	-	0.000	-	-	10.796	-	-	0.000	-		7.921	-	-	7.921
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	10.796	-	-	0.000	-	-	7.921	-	-	7.921

^(†) indicates the presence of a P-5a

Footnotes:

(8) This cost element was titled "Attrition Air Vehicles" in prior budget submissions and is changed to a more appropriate title of "USMC RQ-21 System Component - Air Vehicle". Procurements required to replace the air vehicle components of the RQ-21A system lost during operations. The requirement for air vehicles is based on actual attrition rates observed from the first 7,000 USMC flight hours of the RQ-21A system and projected reliability improvements from fixes to root causes of previous air vehicle losses, including differential GPS system, command and control data link logic, and engine reliability. OCO requirement is tied to JUONS 0265.

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Exhibit P-5a, Procurement History and Planning: PB 2020 N	Date: March 2019	
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0444 / STUASLO	2 / USMC RQ-21 BlackJack

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) USMC RQ-21 System Component - Air Vehicles ^(†)		2019 ⁽⁹⁾	Insitu, Inc. ⁽¹⁰⁾ / Bingen, WA	SS / FFP	NAVAIR HQ, Patuxent River, MD	Feb 2019	Apr 2019	2	1,500.000	Y		
1.1.1) USMC RQ-21 System Component - Air Vehicles ^(†)	1	2020	Insitu, Inc. ⁽¹⁰⁾ / Bingen, WA	SS / FFP	NAVAIR HQ, Patuxent River, MD	Feb 2020	Apr 2020	5	1,584.200	Y		

^(†) indicates the presence of a P-21

Footnotes:

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⁽⁹⁾ FY 2019 USMC RQ-21 System Component - Air Vehicles will award on the FY 2018 Full Rate Production Contract.

⁽¹⁰⁾ Production rates listed are for the Attrition Air Vehicle component of the RQ-21A system. Planned FMS RQ-21 system procurements will likely keep production rates above MSR. The Program Office works closely with the manufacturer to mitigate any product quality reduction or cost increases if production falls below MSR

Exhibit P-21, Production Schedul	PR 2020 Nav											Date	: Mar	ch 20	110				—
Appropriation / Budget Activity / 1506N / 04 / 1			P-1 Line 0444 / S			Title:						Item	Num ISMC	ber /	Title				
Cost Elements (Units in Each)		ı	Fiscal Year 2019									Fiscal Ye	ear 2020						E
ACCEPT				Calend	dar Year 201	9							Calend	dar Yea	r 2020				L
M	O N D C O E T V C	J F A E N B	M A A P R R	M J A U Y N		A U G	S O C C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J U L	A U G	S E P	1 0
1.1.1) USMC RQ-21 System Component - Air Vehicles (8)			·			<u> </u>	·					· ·	·						
1 2019 NAVY 2 0 2		Α -	- 2																
✓ 1 2020 NAVY 5 0 5											A -	-	5						
	O N D C O E T V C	J F A E N B	M A P R R	M J A U Y N		A U G	S O E C P T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0444 / STUASLO	2 / USMC RQ-21 BlackJack

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						li	nitial			Red	rder	
Ref #	1	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Insitu, Inc. ⁽¹⁰⁾ - Bingen, WA	30	40	60	0		3	6	0	5	2	7

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

(10) Production rates listed are for the Attrition Air Vehicle component of the RQ-21A system. Planned FMS RQ-21 system procurements will likely keep production rates above MSR. The Program Office works closely with the manufacturer to mitigate any product quality reduction or cost increases if production falls below MSR

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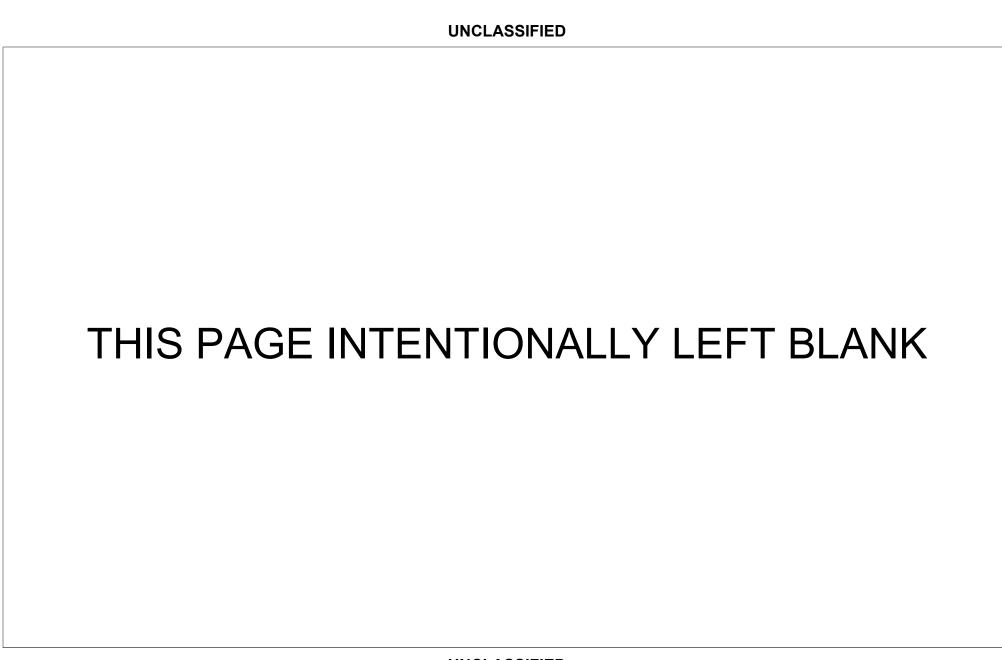


Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0451 / MQ-9A Reaper

ID Code (A=Service Ready), B=Not Service Ready): A Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	3	3	3	-	-	-	-	6
Gross/Weapon System Cost (\$ in Millions)	0.000	0.000	0.000	0.000	77.000	77.000	77.000	0.000	0.000	0.000	-	154.000
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	0.000	0.000	0.000	77.000	77.000	77.000	0.000	0.000	0.000	-	154.000
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	0.000	0.000	0.000	77.000	77.000	77.000	0.000	0.000	0.000	-	154.000
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	23,021.667	23,021.667	25,666.667	-	-	-	-	24,344.167
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	25,666.667	25,666.667	25,666.667	-	-	-	-	25,666.667

Description:

The MQ-9A Reaper aircraft is a single-engine, turbo-prop Remotely Piloted Aircraft (RPA) designed to operate over-the-horizon at medium-to-high altitude for long endurance sorties. The aircraft is being designed primarily to prosecute critical emerging Time-Sensitive-Targets (TST) as a radar, Electro-Optical/Infra-Red (EO/IR), and laser designator-based attack asset with on-board hard-kill capability (hunter-killer) while performing Intelligence, Surveillance, Reconnaissance and Target Acquisition (ISR TA). In the hunter-killer role, the aircraft will employ fused multi-spectral sensor information to find, fix, and track ground targets and assess post-strike results using Automatic Target Cuing (ATC), Target Location Accuracy (TLA), Metric Sensor and other capabilities.

The Ground Control Station (GCS) functions as the aircraft cockpit and can control the aircraft from either within Line-of-Sight (LOS) or Beyond Line-of-Sight (BLOS) via a combination of satellite relay and terrestrial communication architectures. The GCS is either mobile to support forward operating locations or fixed at a facility to support Remote Split Operations (RSO). The GCS has the capability to perform mission planning functions; provides a means for manual and/or autonomous command and control; allows personnel to launch, recover, and monitor aircraft, payloads, and system communications status; secure data links to receive payload sensor data and command links; monitor threats to the aircraft; display common operational picture information; and provide support functions. Additionally, a Launch and Recovery GCS (LRGCS) allows for servicing, systems check, maintaining, launching, and recovering aircraft under LOS control for hand-off to a mobile or fixed GCS.

MQ-9A Reaper procurement includes all components of the MQ-9A weapon system. The basic MQ-9A Reaper system consists of the aircraft, sensors, a GCS, communications equipment, weapon kits, support equipment, simulator and training devices, and technical data/training.

Flyaway cost subtotal includes GCS, Ground Data Terminals (GDTs), and Predator Primary Satellite Links (PPSLs) which are not procured in the same quantities as aircraft. Thus, the unit flyaway cost will fluctuate as different quantities of GCSs, GDTs, and PPSLs are procured.

MQ-9As are procured sole-source with General Atomics-Aeronautical Systems Incorporated (GA-ASI). GA-ASI is responsible for the aircraft and Ground Control Station (GCS), The Raytheon Company for the Multi-Spectral Targeting System-B (MTS-B) EO/IR sensor, and L3 Communications for the Operator Simulator and satellite communication (SATCOM) infrastructure components.

This is a FY 2020 new start.

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 P-1 Line #27

 Volume 1 - 215

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0451 / MQ-9A Reaper

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / MQ-9A Reaper	P-5a, P-21			- / 0.000	- / 0.000	- / 0.000	- / 0.000	3 / 77.000	3 / 77.000
P-40	Total Gross/Weapon System Cost				- / 0.000	- / 0.000	- / 0.000	- / 0.000	3 / 77.000	3 / 77.000

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

OCO:

FY 2020 funding supports Operation Freedom Sentinel - Afghanistan, for the procurement of three MQ-9A aircraft and associated equipment. This is a FY 2020 new start.

MQ-9A Reaper procurement includes all components of the MQ-9A weapon system. The basic MQ-9A Reaper system consists of the aircraft, sensors, a GCS, communications equipment, weapon kits, support equipment, simulator and training devices, and technical data/training.

LI 0451 - MQ-9A Reaper Navy

Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:
1506N / 04 / 1

Date: March 2019

Item Number / Title [DODIC]:
1 / MQ-9A Reaper

1 / MQ-9A Reaper

ID Code (A=Service Ready, B=Not Service Ready):		N	MDAP/MAIS Code:								
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total					
Procurement Quantity (Units in Each)	-	-	-	-	3	3					
Gross/Weapon System Cost (\$ in Millions)	0.000	0.00	0.000	0.000	77.000	77.000					
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-					
Net Procurement (P-1) (\$ in Millions)	0.000	0.00	0.000	0.000	77.000	77.000					
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-					
Total Obligation Authority (\$ in Millions)	0.000	0.00	0.000	0.000	77.000	77.000					
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reque	sts are documented elsewhe	re.)							
Initial Spares (\$ in Millions)	-	-	-	-	-	-					
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	25,666.667	25,666.667					

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	Prior Years		3		FY 2018			FY 2019		FY 2020 Base				FY 2020 OCO			FY 2020 Total		
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	
Flyaway Cost																			
Recurring Cost	-																	_	
1.1.2) MQ-9A Reaper Aircraft /CFE (New Production) ^{(†) (1)}	-	-	-	-	-	-	-	-	-	-	-	0.000	17,893.000	1	17.893	17,893.000	1	17.89	
1.1.3) MQ-9A Reaper Aircraft /CFE (COCO) ^{(†) (2)}	-	-	-	-	-	-	-	-	-	-	-	0.000	11,699.000	2	23.398	11,699.000	2	23.39	
1.1.4) Fixed Ground Control Station	-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	7.208	-	-	7.208	
1.1.5) Mobile Ground Control Station/ OPS Center	-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	7.900	-	-	7.900	
1.1.6) Payloads (Skytower Pod)	-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	10.976	-	-	10.97	
1.1.7) Payloads (Weapons) ⁽³⁾	-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	1.690	-	-	1.69	
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	69.065	-	-	69.06	
Subtotal: Flyaway Cost	-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	69.065	-	-	69.06	
Support Cost																			
2.1) Deployment Support Kits	-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	7.202	-	-	7.20	
2.2) Production Engineering Support	-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	0.733	-	-	0.733	
Subtotal: Support Cost	-	-	-	-		-	-		-	-		0.000	-	-	7.935	-	-	7.93	

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Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0451 / MO-9A Reaper	1 / MO-9A Reaper

ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	Prior Years FY 2018				FY 2019 FY 2020 Base					F	Y 2020 OC	0	FY 2020 Total					
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	25,666.667	3	77.000	25,666.667	3	77.000

^(†) indicates the presence of a P-5a

Footnotes:

- (1) The new production aircraft is estimated based on USAF and General Atomics proposed costs.
- (2) The new production aircraft is estimated based on USAF and General Atomics proposed costs. The cost of the two COCO aircraft which are currently being utilized to support USMC ISR services have been depreciated in value estimations based on the usage over the past two years of service.
- (3) Weapons Payload consists of Bomb Racks and Missile/Rocket Launchers.

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P-1 Line #27

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Exhibit P-5a, Procurement History and Planning: PB 2020 N	Date: March 2019	
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	1 / MQ-9A Reaper	

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
1.1.2) MQ-9A Reaper Aircraft /CFE (New Production) ^(†)	1	2020 (4)	GA-ASI ⁽⁵⁾ / Poway, CA	SS / FFP	AFLCMC Wright Patterson AFB	Mar 2020	Aug 2022	1	17,893.000	Y		Dec 2019
1.1.3) MQ-9A Reaper Aircraft /CFE (COCO) ^(†)	1	2020	GA-ASI / Poway, CA	SS / FFP	AFLCMC Wright Patterson AFB	Mar 2020	Jul 2020	2	11,699.000	Υ		Dec 2019

^(†) indicates the presence of a P-21

Footnotes:

⁽⁴⁾ The MQ-9A Reaper procurement will be conducted utilizing an existing contract, USAF PCO at AFLCMC Wright Patterson AFB with General Atomics Aeronautical Systems, Inc (GA-ASI) production line supporting USAF procurements. Two of the three MQ-9A aircraft planned for procurement are currently being utilized in a Contractor Operated Contracted Owned (COCO) support of Intelligence, Surveillance, and Reconnaissance (ISR) services in support of Taskforce Southwest

⁽⁵⁾ Production rates have sufficient capacity for USN/USMC procurement.

Exhibit F	P-21, Pro	oduct	ion Sc	hedu	le: PE	3 202	0 Nav	/y														Date	: Maı	rch 20	019				
Appropr 1506N / (Budge	et Acti	vity /	Budg	get Sı	ub Ac	tivity	:		Line 51 / M			ber / i	Title:								Num 1Q-9A			[DOI	DIC]:		
		ements n Each)								Fiscal Y	ear 2020											Fiscal Yo	ear 2021						ВА
			ACCEPT			,						С	alendar	Year 202	0								Calen	dar Yea	r 2021	,			L
O F C R O # FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	N C E
1.1.2) MQ-9A	Reaper Aircra	aft /CFE (N	New Produc	ction) (1)															,										
√ 1 2020	NAVY	1	0	1						Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
1.1.3) MQ-9A	Reaper Aircra	aft /CFE (0	COCO) (2)																										
✓ 2 2020	NAVY	2 (6)	0	2		-				Α -	-	-	-	2															
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	J U L	A U G	S E P	

								• • • • • • • • • • • • • • • • • • • •																	
Exhibit P-21, Production Sched	dule	: PB 20	20 Na	vy														Date	e: Ma	rch 20)19				
Appropriation / Budget Activity 1506N / 04 / 1	y / B	udget	Sub A	ctivity	' :	1	Line 51 / M				Title:								Nun //Q-9/			[DOI	OIC]:		
Cost Elements (Units in Each)						Fiscal \	ear 2022											Fiscal Y	ear 2023						ВА
ACCEPT	L							С	alendar	Year 20	22								Caler	ndar Yea	r 2023				Ļ
M	JE OF	O N C O T V	E	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J	n n	A U G	S E P	A N C E
1.1.2) MQ-9A Reaper Aircraft /CFE (New Production)	(1)	<u> </u>								,			,							,					
√ 1 2020 NAVY 1 0	1	-		-	-	-	-	-	-	-	1														
1.1.3) MQ-9A Reaper Aircraft /CFE (COCO) (2)								·																	
√ 2 2020 NAVY 2 (6) 2	0																								(
		O N C O T V	E	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	U U	A U G	S E P	

Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0451 / MQ-9A Reaper	1 / MQ-9A Reaper

		Produc	ction Rates (Each	/ Year)				Procurement Lea	adtime (Months)			
MFR						Ir	itial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2020	1-8-5 For 2020	MAX For 2020	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	GA-ASI (5) - Poway, CA	10	18	36	0		5 24	29	0	0	0	0
2	GA-ASI - Poway, CA			TBD	0	4	0	4	0	0	0	0

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

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 P-1 Line #27

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⁽⁵⁾ Production rates have sufficient capacity for USN/USMC procurement.

⁽⁶⁾ The two aircraft identified are currently being utilized in a Contractor Operated Contracted Owned (COCO) support of Intelligence, Surveillance, and Reconnaissance (ISR) services in support of Taskforce Southwest. The procurement timeline identified supports the receipt and inspection for the two (2) aircraft.

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0455 / VH-92A Executive Helo

ID Code (A=Service Ready, B=Not Service Ready): B Program Elements for Code B Items: 0604273N, 0604273M Other Related Program Elements: 0901212M

Line Item MDAP/MAIS Code: 429

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Procurement Quantity (Units in Each)	-	-	6	6	-	6	5	-	-	-	-	17
Gross/Weapon System Cost (\$ in Millions)	0.000	0.000	649.015	658.067	0.000	658.067	712.993	0.000	0.000	0.000	-	2,020.075
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	0.000	649.015	658.067	0.000	658.067	712.993	0.000	0.000	0.000	-	2,020.075
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	0.000	649.015	658.067	0.000	658.067	712.993	0.000	0.000	0.000	-	2,020.075
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	80.939	87.983	-	87.983	73.907	-	-	-	-	242.829
Flyaway Unit Cost (\$ in Thousands)	-	-	93,499.667	93,889.000	-	93,889.000	100,466.200	-	-	-	-	95,686.059
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	108,169.167	109,677.833	-	109,677.833	142,598.600	-	-	-	-	118,827.941

Description:

The VH-92A is the replacement helicopter for the VH-3D and the VH-60N, the aircraft currently used by Marine Helicopter Squadron One (HMX-1) for the safe and timely transportation of the President, Vice President, and other distinguished officials as directed by the White House Military Office (WHMO). The global nature of these commitments requires HMX-1 aircraft to deploy worldwide and operate in varying environmental and climactic conditions without mission degradation. This funding supports the procurement of the aircraft, mission equipment, technical data and publications, support equipment, logistics support and production engineering support.

Milestone C: 3Q FY19

Full Rate Production Decision: 2Q FY21

Developmental Test & Evaluation: 2Q FY17 - 1Q FY20 Initial Operational Test & Evaluation: 1Q FY20 - 3Q FY20 Follow - On Test & Evaluation: 3Q FY20 - 4Q FY24

Exhibit P-40, Budget Line Item Justification: PB 2020 Navy

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

1506N: Aircraft Procurement, Navy / BA 04: Other Aircraft / BSA 1: Other Aircraft

0455 / VH-92A Executive Helo

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0604273N, 0604273M

Other Related Program Elements: 0901212M

Line Item MDAP/MAIS Code: 429

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / VH-92A Executive Helo	P-5a, P-21			- /0.000	- / 0.000	6 / 649.015	6 / 658.067	- / 0.000	6 / 658.067
P-40	Total Gross/Weapon System Cost				- / 0.000	- / 0.000	6 / 649.015	6 / 658.067	- / 0.000	6 / 658.067

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY 2020 Budget Request includes six (6) Low Rate Initial Production (LRIP) VH-92A aircraft and associated support costs to support the transition of HMX-1 from the VH-3D and VH-60N to the VH-92A aircraft.

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Exhibit P-5, Cost Analysis: PB 2020 Navy

Appropriation / Budget Activity / Budget Sub Activity:

1506N / 04 / 1

P-1 Line Item Number / Title:

0455 / VH-92A Executive Helo

1 / VH-92A Executive Helo

ID Code (A=Service Ready, B=Not Service Ready):		MD	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	-	-	6	6	-	6
Gross/Weapon System Cost (\$ in Millions)	0.000	0.000	649.015	658.067	0.000	658.067
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	0.000	649.015	658.067	0.000	658.067
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	0.000	649.015	658.067	0.000	658.067
(The following Resource Summary rows are for informati	onal purposes only. The corr	esponding budget requests	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	80.939	87.983	-	87.983
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	108,169.167	109,677.833	-	109,677.833

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	3		FY 2018			FY 2019		F۱	/ 2020 Bas	se	F	/ 2020 OC	0	FY	2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost							'	'		'					'	'		'
Recurring Cost																		
1.1.1) Airframe/CFE ^(†) (1)	-	-	-	-	-	-	78,154.600	6	468.928	76,169.000	6	457.014	-	-	-	76,169.000	6	457.0
1.1.2) Mission Equipment CFE ⁽²⁾	-	-	-	-	-	-	-	-	35.453	-	-	38.457	-	-	-	-	-	38.4
1.1.3) Mission Equipment GFE	-	-	-	-	-	-	-	-	39.132	-	-	39.551	-	-	-	-	-	39.5
1.1.4) Engines/Engine ACC	-	-	-	-	-	-	-	-	0.036	-	-	0.037	-	-	-	-	-	0.0
1.1.5) Rec Flyaway ECO ⁽³⁾	-	-	-	-	-	-	-	-	17.449	-	-	24.871	-	-	-	-	-	24.87
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	560.998	-	-	559.930	-	-	-	-	-	559.9
Non Recurring Cost						,									,			
1.2.1) Other Non- Recurring ⁽⁴⁾	-	-	-	-	-	-	-	-	-	-	-	3.404	-	-	-	-	-	3.4
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	3.404	-	-	-	-	-	3.40
Subtotal: Flyaway Cost	-	-	-	-	-	-	-	-	560.998	-	-	563.334	-	-	-	-	-	563.3
Support Cost	·							,					·			· ·		
2.1) Airframe PGSE (5)	-	-	-	-	-	-	-	-	13.499	-	-	6.769	-	-	-	-	-	6.76
2.2) Engine PGSE (6)	-	-	-	-	-	-	-	-	1.966	-	-	1.515	-	-	-	-	-	1.5
2.3) Avionics PGSE	-	-	-	-	-	-	-	-	9.026	-	-	7.418	-	-	-	-	-	7.4

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Exhibit P-5, Cost Analysis: PB 2020 Navy		Date: March 2019
, , , , , , , , , , , , , , , , , , , ,	P-1 Line Item Number / Title: 0455 / VH-92A Executive Helo	Item Number / Title [DODIC]: 1 / VH-92A Executive Helo

MDAP/MAIS Code:

Note: Cubtatale or Tatale in this Fubibit D.E. mount be event or our eventh due to reunding

Note: Subtotals or Totals				JI SUIII EXACU		nuing.												
	F	Prior Years	3		FY 2018			FY 2019		F۱	Y 2020 Bas	se	F	Y 2020 OC	0	FY	/ 2020 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
2.4) Pec Trng Eq	-	-	-	-	-	-	-	-	4.802	-	-	3.621	-	-	-	-	-	3.621
2.5) Pubs/Tech Data	-	-	-	-	-	-	-	-	6.940	-	-	5.158	-	-	-	-	-	5.158
2.6) Production Engineering Support ⁽⁷⁾	-	-	-	-	-	-	-	-	35.071	-	-	51.340	-	-	-	-	-	51.340
2.7) Other/ILS (8)	-	-	-	-	-	-	-	-	16.713	-	-	18.912	-	-	-	-	-	18.912
Subtotal: Support Cost	-	-	-	-	-	-	-	-	88.017	-	-	94.733	-	-	-	-	-	94.733
Gross/Weapon System			0.000			0.000	100 160 167	c	C40.04E	100 677 922		659.067			0.000	100 677 922		659.067

^(†) indicates the presence of a P-5a

ID Code (A=Service Ready, B=Not Service Ready):

Footnotes:

- (1) The Airframe/CFE includes the S-92A baseline aircraft, modification of the S-92A aircraft to the VH-92A configuration, the Forward Air Stair Door improvement, material related to the airframe, Integration, Assembly, Test and Check-out (IATCO), systems engineering and program management labor and advanced capabilities requirements.
- (2) The Mission Equipment CFE line is avionics material, which includes the Mission Communications System. The increase from FY 2019 to FY 2020 is due to the incorporation of the Fifth Multifunction Display (MFD).
- (3) Projected ECO costs remain steady at 3 to 6 percent of Flyaway Cost each year due to the low production quantity and short production time.
- (4) The Other Non-Recurring funding in FY 2020 will be used to bring the System Demonstration Test Article (SDTA) aircraft used during IOT&E to Production representative status for delivery to the squadron.
- (5) The Airframe PGSE, Engine PGSE, and Avionics PGSE costs reflect actual need dates of equipment for depot standup requirements, and the inclusion of support equipment required for painting the aircraft.
- (6) The increase in Engine PGSE in FY 2021 is due to more defined depot standup requirements.
- (7) Due to the Milestone C Decision in 3rd Quarter FY 2019, the FY 2019 Production Engineering Support does not represent a full fiscal year of support requirements. The FY 2020 Production Engineering Support represents a full year of support requirements.
- (8) The ILS funding increase covers Interim Contractor Support required through final aircraft deliveries.

Exhibit P-5a, Procurement History and Planning: PB 2020 N	lavy	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
1506N / 04 / 1	0455 / VH-92A Executive Helo	1 / VH-92A Executive Helo

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Airframe/CFE ^(†)		2019	Sikorsky A/C Corp ⁽⁹⁾ / Stratford, CT	C / FFP	NAVAIR, Patuxent River, MD	Apr 2019	May 2021	6	78,154.600	Y		Apr 2017
1.1.1) Airframe/CFE ^(†)		2020	Sikorsky A/C Corp (9) / Stratford, CT	C / FFP	NAVAIR, Patuxent River, MD	Jan 2020	Mar 2022	6	76,169.000	Y		Apr 2017

^(†) indicates the presence of a P-21

Footnotes:

(9) The FY 2019 (LRIP Lot 1) and FY 2020 (LRIP Lot 2) reorder manufacturing lead times are 25 months. The FY 2021 (FRP) reorder manufacturing lead time is shorter at 23 months based on gained learning, efficiencies and experience on the production line.

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1.1	.1) A	irframe	/CFE (1)										,																		
	1 :	2019	NAVY	6	0	6							Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
	1 :	2020	NAVY	6	0	6																Α -	-	-	-	-	-	-	-	-	6
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1.1	.1) Airfra	me/CFE (1)		1			1					1																		
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1.1	.1) Ai	irframe	/CFE (1)										,										1								
	1 2	2019	NAVY	6	6	0																									
	1 2	2020	NAVY	6	4	2	1	-	1																						
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Exhibit P-21, Production Schedule: PB 2020 Navy		Date: March 2019
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Item Number / Title [DODIC]:
1506N / 04 / 1	0455 / VH-92A Executive Helo	1 / VH-92A Executive Helo

		Produc	ction Rates (Each	/ Year)	Procurement Leadtime (Months)													
MFR						In	itial		Reo	rder								
Ref #	Manufacturer Name - Location					ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1						
	Sikorsky A/C Corp ⁽⁹⁾ - Stratford, CT	4	6	8	18	(25	31	3	3	25	28						

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

(9) The FY 2019 (LRIP Lot 1) and FY 2020 (LRIP Lot 2) reorder manufacturing lead times are 25 months. The FY 2021 (FRP) reorder manufacturing lead time is shorter at 23 months based on gained learning, efficiencies and experience on the production line.

LI 0455 - VH-92A Executive Helo Navy

